## SEQUENCE LISTING

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<110> Xu, Jiangchun
           Dillon, Davin C.
           Mitcham, Jennifer L.
           Harlocker, Susan Louise
           Jiang Yugui
           Reed, Steven G.
           Kalos, Michael
           Fanger, Gary
           Retter, Mark
           Solk, John
           Day, Craig
     <120> COMPOSITIONS AND METHODS FOR THERAPY AND
            DIAGNOSIS OF PROSTATE CANCER
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     <140> US
     <141> 2001-12-05
     <160> 575
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aagtttgcag atgtatttgc aaagaagacg aaggcagagt ggtgtcaaat ctttgacggc
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tcgctcattg atcctngcnc ccggtcttcg gctgcggnga acggttcact cctcaaaggc
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togtagaact ggggttotat tgotocaaca gocatgaatt coccatotgo tgtootgtaa
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gaatgggnaa atgggacccc cctgttaccg cgcattnaac ccccgcnggg tttngttgtt
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acceccaent nnacegetta caetttgeca gegeettane geeegeteee ttteneettt
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teggaacact ggetgtetet gaagacttet egeteagttt eagtgaggae acaeacaaag
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acgtgggtga ccatgttgtt tgtggggtgc agagatggga ggggtggggc ccaccctgga
                                                                       300
agagtggaca gtgacacaag gtggacactc tctacagatc actgaggata agctggagcc
                                                                       360
acaatgcatg aggcacacac acagcaagga tgacnctgta aacatagccc acgctgtcct
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gngggcactg ggaagcctan atnaggccgt gagcanaaag aaggggagga tccactagtt
                                                                       480
ctanagegge egecacegeg gtgganetee anettttgtt eeetttagtg agggttaatt
gcgcgcttgg cntaatcatg gtcatanctn tttcctgtgt gaaattgtta tccgctcaca
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attccacaca acatacganc cggaaacata aantgtaaac ctggggtgcc taatgantga
ctaactcaca ttaattgcgt tgcgctcact gcccgctttc caatcnggaa acctgtcttg
                                                                       660
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concttgcat tnatgaaton gccaaccccc ggggaaaagc gtttgcgttt tgggcgctct
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tecgetteet eneteantta ntecetnene teggteatte eggetgenge aaaceggtte
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tgaagtaaat ctagccatgc ttttaaaaaa tgctttaggt cactccaagc ttggcagtta
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cattcagttt tcaaagtagg agacaggttc tacagtatca ttttacagtt tccaacacat
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gatattggtc atttttacca gcttctaaat ctnaactttc aggcttttga actggaacat
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tgnatnacag tgttccanag ttncaaccta ctggaacatt acagtgtgct tgattcaaaa
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tgtaaagtga aatattagtt ggcggatgaa gcagatagtg aggaaagttg agccaataat
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300
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gtcattanga nggctnaaaa ggccctgtta ngggtctggg ctnggtttta cccnacccat
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cnttatentn aaaggtnata aceneteeta tnateeeace caatngnatt eeccaenenn
                                                                        720
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acctgcctgg gtccaaacac tgagccctgc tggcggactt caagganaac ccccacangg
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tetttgangt gagececatg tecatetggg ceaetgteng gaecacettt ngggagtgtt
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ggngttccc

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cncentantg cacenattce caentttnne agnttteene nnegngette ettntaaaag
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gcacagggtg gcagcaaaaa aaccacttta ctttggcaca aacaaaaact ngggggggca
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ctgaagatct tcgggccact gtcgtccagt gccatgcagt ttgtcaacgt gggctacttc
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actgagagca agtgtgccct cgtgacgttc ttcttcatcc tcctcctcat cttcattgct
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                                                                        120
                                                                        180
ggcaggtcca cgcagtgccc tttgtcactg gggaaatgga tgcgctggag ctcgtcaaag
ccactcgtgt atttttcaca ggcagcctcg tccgacgcgt cggggcagtt gggggtgtct
                                                                        240
                                                                        300
tcacactcca ggaaactgtc natgcagcag ccattgctgc agcggaactg ggtgggctga
cangtgccag agcacactgg atggcgcctt tccatgnnan gggccctgng ggaaagtccc
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tganccccan anctgeetet caaangeeee acettgeaca eeeegacagg etagaatgga
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atcttcttcc cgaaaggtag ttnttcttgt tgcccaancc anccccntaa acaaactctt
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gcanatctgc tccgnggggg tcntantacc ancgtgggaa aagaacccca ggcngcgaac
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caancttgtt tggatncgaa gcnataatct nctnttctgc ttggtggaca gcaccantna
                                                                        600
                                                                        660
ctgtnnanct ttagncentg gteetentgg gttgnnettg aacctaaten cennteaact
gggacaaggt aantngcent cetttnaatt ceenanentn ceeeetggtt tggggttttn
                                                                        720
                                                                        780
cncnctccta ccccaqaaan nccgtgttcc cccccaacta ggggccnaaa ccnnttnttc
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cacaaccetn ceceacecae gggttengnt ggttng
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      <211> 783
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(783)
      <223> n = A, T, C or G
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120
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aagacccaaa ccaggtggaa ctgtggggac tcaaggaang cacctacctg ttccagctga
cagtgactag ctcagaccac ccagaggaca cggccaacgt cacagtcact gtgctgtcca
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ccaagcagac agaagactac tgcctcgcat ccaacaangt gggtcgctgc cggggctctt
                                                                       300
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teccaegetq qtaetatgae eccaeggage agatetgeaa gagtttegtt tatggagget
gcttgggcaa caagaacaac taccttcggg aagaagagtg cattctancc tgtcngggtg
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tgcaaggtgg gcctttgana ngcanctctg gggctcangc gactttcccc cagggcccct
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ccatggaaag gcgccatcca ntgttctctg gcacctgtca gcccacccag ttccgctgca
                                                                       540
ncaatggctg ctgcatcnac antttcctng aattgtgaca acacccccca ntgcccccaa
                                                                       600
ccctcccaac aaagcttccc tgttnaaaaa tacnccantt ggcttttnac aaacncccgg
                                                                       660
cneeteentt tteecenntn aacaaaggge netngenttt gaactgeeen aaccenggaa
                                                                       720
tetneenngg aaaaantnee eeceetggtt eetnnaanee eeteenenaa anetneeeee
                                                                       780
                                                                       783
CCC
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      <211> 801
      <212> DNA
      <213> Homo sapien
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      <221> misc feature
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ttggctgtgt tggtgacgtt gtcattgcaa cagaatgggg gaaaggcact gttctctttg
aagtagggtg agtcctcaaa atccgtatag ttggtgaagc cacagcactt gagccctttc
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atggtggtgt tccacacttg agtgaagtct tcctgggaac cataatcttt cttgatggca
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ggcactacca gcaacgtcag gaagtgctca gccattgtgg tgtacaccaa ggcgaccaca
gcagctgcaa cctcagcaat gaagatgagg aggaggatga agaagaacgt cncgagggca
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                                                                        480
cacttgctct ccgtcttagc accatagcag cccangaaac caagagcaaa gaccacaacg
                                                                        540
congctgcga atgaaagaaa ntacccacgt tgacaaactg catggccact ggacgacagt
tggcccgaan atcttcagaa aagggatgcc ccatcgattg aacacccana tgcccactgc
                                                                        600
                                                                        660
cnacaggget geneenenen gaaagaatga gecattgaag aaggatente ntggtettaa
                                                                        720
tgaactgaaa contgoatgg tggcccctgt tcagggctct tggcagtgaa ttctganaaa
                                                                        780
aaggaacngc ntnagccccc ccaaangana aaacaccccc gggtgttgcc ctgaattggc
                                                                        801
ggccaaggan ccctgccccn g
      <210> 17
      <211> 740
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(740)
      <223> n = A, T, C or G
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cctttqtqqa gcctcagcag ttccctcttt cagaactcac tgccaagagc cctgaacagg
agccaccatg cagtgettea getteattaa gaccatgatg atcetettea atttgeteat
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ctttctgtgt ggtgcagccc tgttggcagt gggcatctgg gtgtcaatcg atggggcatc
                                                                        240
ctttctqaaq atcttcqqqc cactqtcqtc cagtqccatg cagtttqtca acqtqgqcta
                                                                        300
                                                                        360
```

cttecteate geageeggeg ttgtggtett tgetettggt tteetggget getatggtge

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420
taagacggag agcaagtgtg ccctcgtgac gttcttcttc atcctcctcc tcatcttcat
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tgctgaagtt gcagctgctg tggtcgcctt ggtgtacacc acaatggctg aaccattcct
                                                                       540
gacgttgctg gtantgcctg ccatcaanaa agattatggg ttcccaggaa aaattcactc
aantntggaa caccnccatg aaaagggete caatttetgn tggetteece aactataceg
                                                                       600
gaattttgaa aganteneec taetteeaaa aaaaaanant tgeetttnee eeenttetgt
                                                                       660
                                                                       720
tgcaatgaaa acntcccaan acngccaatn aaaacctgcc cnnncaaaaa ggntcncaaa
                                                                       740
caaaaaaant nnaagggttn
      <210> 18
      <211> 802
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(802)
      <223> n = A, T, C or G
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caaggtette cagetgeege acattaegea gggeaagage etceageaac actgeatatg
                                                                        120
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ggatacactt tactttagca gccagggtga caactgagag gtgtcgaagc ttattcttct
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gagectetgt tagtggagga agatteeggg etteagetaa gtagteageg tatgteecat
aagcaaacac tgtgagcagc cggaaggtag aggcaaagtc actctcagcc agctctctaa
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cattgggcat gtccagcagt tctccaaaca cgtagacacc agnggcctcc agcacctgat
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ggatgagtgt ggccagcgct gcccccttgg ccgacttggc taggagcaga aattgctcct
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ggttctgccc tgtcaccttc acttccgcac tcatcactgc actgagtgtg ggggacttgg
                                                                        480
                                                                        540
gctcaggatg tccagagacg tggttccgcc ccctcnctta atgacaccgn ccanncaacc
                                                                        600
atcagetece accepanting their tegetestic etaggeteagg greatestage enetacting
                                                                        660
aancttcgtc nggcccatgg aattcaccnc accggaactn gtangatcca ctnnttctat
                                                                        720
aaccggncgc caccgcnnnt ggaactccac tcttnttncc tttacttgag ggttaaggtc
                                                                        780
accettnncg ttacettggt ccaaacentn centgtgteg anatngtnaa tenggneena
                                                                        802
tnccancene atangaagee ng
      <210> 19
      <211> 731
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(731)
      <223> n = A, T, C or G
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gagcccaccg tcacgnggng gngtctttat nggagggggc ggagccacat cnctggacnt
                                                                        180
entgacceca acteceence neneantgea gtgatgagtg cagaactgaa ggtnacgtgg
caggaaccaa gancaaanne tgeteennte caagteggen nagggggegg ggetggeeae
                                                                        240
geneateent enagtgetgn aaageeeenn eetgtetaet tgtttggaga aengennnga
                                                                        300
catgcccagn gttanataac nggcngagag tnantttgcc tetecettec ggetgegean
                                                                        360
                                                                        420
cgngtntgct tagnggacat aacctgacta cttaactgaa ccenngaatc tneencecet
ccactaaget cagaacaaaa aacttegaca ccacteantt gteacetgne tgeteaagta
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aagtgtaccc catnoccaat gtntgctnga ngctctgncc tgcnttangt tcggtcctgg
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qaaqacctat caattnaaqc tatgtttctg actgcctctt gctccctgna acaancnacc
cnncnntcca aggggggnc ggccccaat cccccaacc ntnaattnan tttanccccn
                                                                        660
                                                                        720
ccccnqqcc cqqcctttta cnancntcnn nnacnggqna aaaccnnngc tttncccaac
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731
nnaatccncc t
      <210> 20
      <211> 754
      <212> DNA
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      <220>
      <221> misc feature
      <222> (1)...(754)
      <223> n = A, T, C or G
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caacccctc ntccaaatnn contttccgg gngggggttc caaacccaan ttanntttgg
                                                                       120
annttaaatt aaatnttnnt tggnggnnna anccnaatgt nangaaagtt naacccanta
                                                                       180
tnancttnaa tncctggaaa cengtngntt ccaaaaatnt ttaaccetta anteceteeg
                                                                       240
aaatngttna nggaaaaccc aanttctcnt aaggttgttt gaaggntnaa tnaaaanccc
                                                                       300
nnccaattgt ttttngccac gcctgaatta attggnttcc gntgttttcc nttaaaanaa
                                                                       360
ggnnancccc ggttantnaa tccccccnnc cccaattata ccganttttt ttngaattgg
                                                                       420
ganccenegg gaattaaegg ggnnnnteee tnttgggggg enggnneece eccenteggg
                                                                       480
                                                                       540
ggttngggnc aggnennaat tgtttaaggg teegaaaaat eeeteenaga aaaaaanete
ccaqqntgag nntngggttt ncccccccc canggcccct ctcgnanagt tggggtttgg
                                                                       600
qqqqcctqqq atttintttc cctnttncc tccccccc ccnggganag aggttngngt
                                                                       660
                                                                       720
tttgntenne ggeeceneen aaganetttn eeganttnan ttaaateent geetnggega
                                                                       754
agtccnttgn agggntaaan ggccccctnn cggg
      <210> 21
      <211> 755
      <212> DNA
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      <220>
      <221> misc feature
      <222> (1)...(755)
      <223> n = A, T, C or G
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nngtnagnnc actnonnttn natcacnocc cnccnactac gecenenane enacgeneta
                                                                        120
nncanatncc actganngcg cgangtngan ngagaaanct nataccanag ncaccanacn
                                                                        180
ccagetgtee nanaangeet nnnataengg nnnateeaat ntgnaneete enaagtattn
                                                                        240
nnenneanat gatttteetn anecgattae centneecee taneceetee eececaaena
                                                                        300
cgaaggenet ggneenaagg nngegnenee eegetagnte eeenneaagt eneneneeta
                                                                        360
aactcancen nattaenege ttentgagta teactceeeg aateteacee taeteaaete
                                                                        420
                                                                        480
aaaaanatcn qatacaaaat aatncaagcc tgnttatnac actntgactg ggtctctatt
                                                                        540
ttagnggtcc ntnaanchtc ctaatacttc cagtetnect tenecaattt cenaangget
                                                                        600
ctttengaca geatnttttg gttecenntt gggttettan ngaattgeee ttentngaae
gggctcntct tttccttcgg ttancctggn ttcnnccggc cagttattat ttcccntttt
                                                                        660
                                                                        720
aaattentne entttanttt tggenttena aacceeegge ettgaaaaeg geeeeetggt
                                                                        755
aaaaggttgt tttganaaaa tttttgtttt gttcc
      <210> 22
      <211> 849
      <212> DNA
      <213> Homo sapien
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<220>
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      <222> (1)...(849)
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atcctgnnna cggaanggtc accggnngat nntgctaggg tgnccnctcc cannnenttn
                                                                       180
cataacteng nggccetgee caccacette ggeggeeeng ngneegggee egggteattn
                                                                       240
gnnttaaccn cactnngcna neggttteen neecenneng accenggega teeggggtne
                                                                       300
tctgtcttcc cctgnagncn anaaantggg ccncggnccc ctttacccct nnacaagcca
                                                                       360
engeenteta neenengeee eccetecant nngggggaet geenannget eegttnetng
                                                                       420
nnaccconnn gggtncctcg gttgtcgant cnaccgnang ccanggattc cnaaggaagg
                                                                       480
                                                                       540
tgcgttnttg gcccctaccc ttcgctncgg nncacccttc ccgacnanga nccgctcccg
                                                                       600
chennequing cetenceteg caacaceege netentengt neggninece ecceaceege
necetenene ngnegnanen eteeneenee gteteannea ceaeceegee eegecaggee
                                                                       660
ntcanccacn gqnnqacnnq naqcncnntc gcnccgcgcn gcgncnccct cgccncngaa
                                                                       720
                                                                       780
ctnentengq ccantineqc tcaancenna cnaaacgccg ctgcgcggcc cgnagcgncc
                                                                       840
ncctccncga gtcctcccgn cttccnaccc angnnttccn cgaggacacn nnaccccgcc
                                                                       849
nncangcgg
      <210> 23
      <211> 872
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(872)
      <223> n = A, T, C or G
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                                                                        120
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                                                                       180
cacachenan aganaaatee netgeettee anagtanaen attgaaenng agaaceange
                                                                       240
nggcgaatcg taatnaggcg tgcgccgcca atntgtcncc gtttattntn ccagcntcnc
                                                                       300
ctnccnaccc tacntcttcn nagctgtcnn acccctngtn cgnacccccc naggtcggga
tegggtttnn nntgacegng enneceetee eccenteeat nacganeene eegcaceaee
                                                                       360
nanngenege neecegnnet ettegeenee etgteetntn eecetgtnge etggenengn
                                                                        420
                                                                        480
accgcattga ccctcqccnn ctncnngaaa ncgnanacgt ccgggttgnn annancgctg
tgggnnngcg tctgcnccgc gttccttccn ncnncttcca ccatcttcnt tacngggtct
                                                                        540
                                                                        600
concepents tenneaces categorace threatness acceptance teccesect
                                                                        660
cqncqtqncc cqnccccacc ntcatttnca nacgntcttc acaannncct ggntnnctcc
cnancngncn gtcanccnag ggaagggngg ggnnccnntg nttgacgttg nggngangtc
                                                                        720
                                                                        780
cqaanantcc tencentean enetaceeet egggegnnet etengttnee aaettaneaa
                                                                        840
ntetecceeq ngngemente teagectene concecenet etetgeantg thetetgete
                                                                        872
tnaccnntac gantnttcgn cnccctcttt cc
      <210> 24
      <211> 815
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(815)
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## <223> n = A, T, C or G<400> 24 60 gcatgcaagc ttgagtattc tatagngtca cctaaatanc ttggcntaat catggtcnta nctgncttcc tgtgtcaaat gtatacnaan tanatatgaa tctnatntga caaganngta 120 180 tentneatta gtaacaantg tnntgteeat eetgtengan canatteeca tnnattnegn 240 cgcattcnen geneantatn taatngggaa ntennntnnn neacenneat etatentnee gcnccctgac tggnagagat ggatnanttc tnntntgacc nacatgttca tcttqgattn 300 360 aanancecce eqengneeae eggtingnng enageennte ecaagacete etgiggaggi 420 aacctgcgtc aganncatca aacntgggaa acccgcnncc angtnnaagt ngnnncanan gatecegtee aggnttnace atceettene agegeeecet tingtgeett anagngnage 480 gtgtccnanc cnctcaacat ganacgcgcc agnccanccg caattnggca caatgtcgnc 540 gaacccccta gggggantna tncaaanccc caggattgtc cncncangaa atcccncanc 600 cccnccctac ccnnctttgg gacngtgacc aantcccgga gtnccagtcc ggccngnctc 660 ccccaccggt nnccntgggg gggtgaanct cngnntcanc cngncgaggn ntcgnaagga 720 accggncctn ggncgaanng ancnntcnga agngccncnt cgtataaccc cccctcncca 780 815 nccnacngnt agntccccc engggtncgg aangg <210> 25 <211> 775 <212> DNA <213> Homo sapien <220> <221> misc feature <222> (1)...(775) <223> n = A, T, C or G<400> 25 60 ccqaqatqtc tcqctccqtq qccttagctq tgctcgcgct actctctctt tctggcctgg aggetateca gegtaeteca aagatteagg tttaeteaeg teateeagea gagaatggaa 120 180 agtcaaattt cctgaattgc tatgtgtctg ggtttcatcc atccgacatt gaanttgact tactgaagaa tgganagaga attgaaaaag tggagcattc agacttgtct ttcagcaagg 240 300 actggtcttt ctatctcntg tactacactg aattcacccc cactgaaaaa gatgagtatg cctgccgtgt gaaccatgtg actttgtcac agcccaagat agttaagtgg gatcgagaca 360 420 tgtaagcagn cnncatggaa gtttgaagat gccgcatttg gattggatga attccaaatt ctgcttgctt gcnttttaat antgatatgc ntatacaccc taccctttat gnccccaaat 480 540 tgtaggggtt acatnantgt tcncntngga catgatette etttataant cencentteg 600 aattgcccgt cncccngttn ngaatgtttc cnnaaccacg gttggctccc ccaggtcncc tcttacggaa gggcctgggc cnctttncaa ggttggggga accnaaaatt tcncttntgc 660 720 concorned enniciting nucleantit ggaaccette enatteeect tggeetenna 775 nccttnncta anaaacttn aaancgtngc naaanntttn acttcccccc ttacc <210> 26 <211> 820 <212> DNA <213> Homo sapien <220> <221> misc feature <222> (1)...(820) <223> n = A, T, C or G<400> 26 60 anattantac aqtqtaatct tttcccaqaq gtgtgtanag ggaacggggc ctagaggcat cccanagata nottatanca acaqtqcttt gaccaagagc tgctgggcac atttcctgca 120

gaaaaggtgg cggtccccat cactcctcct ctcccatagc catcccagag gggtgagtag

180

```
ccatcangcc ttcggtggga gggagtcang gaaacaacan accacagagc anacagacca
                                                                       240
                                                                       300
ntgatgacca tgggcgggag cgagcctctt ccctgnaccg gggtggcana nganagccta
                                                                       360
nctgagggt cacactataa acgttaacga ccnagatnan cacctgcttc aagtgcaccc
ttcctacctg acnaccagng accnnnaact gengeetggg gacagenetg ggancageta
                                                                       420
acnnagcact cacctgcccc cccatggccg tncgcntccc tggtcctgnc aagggaagct
                                                                       480
ccctgttgga attncgggga naccaaggga nccccctcct ccanctgtga aggaaaaann
                                                                       540
                                                                       600
gatggaattt tncccttccg gccnntcccc tcttccttta cacgccccct nntactcntc
                                                                       660
tecetetntt nteetgnene aettttnace cennnattte eettnattga teggannetn
                                                                       720
ganattecae thnegeethe entenateng naanaenaaa naethtetha eeenggggat
                                                                       780
aggnnected nteatectet etttttenet aceneenntt etttgeetet eettngatea
tecaacente gntggeentn ecceceennn teetttneee
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      <210> 27
      <211> 818
      <212> DNA
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      <220>
      <221> misc feature
      <222> (1)...(818)
      <223> n = A, T, C or G
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                                                                        120
ctgcggatgc tgtgacggac ccaaggggca aatagggtcc cagggtccag ggaggggcgc
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ctgctgagca cttccgcccc tcaccctgcc cagcccctgc catgagctct gggctgggtc
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tccgcctcca gggttctgct cttccangca ngccancaag tggcgctggg ccacactggc
                                                                        300
ttetteetge ecenteeetg getetgante tetgtettee tgteetgtge angeneettg
                                                                        360
gateteagtt tecetenete anngaactet gtttetgann tetteantta aetntgantt
                                                                        420
tatnaccnan tggnctgtnc tgtcnnactt taatgggccn gaccggctaa tccctccctc
                                                                        480
nctcccttcc anttennnna accngettne ententetee centaneceg cengggaane
                                                                        540
ctcctttgcc ctnaccangg gccnnnaccg cccntnnctn ggggggcnng gtnnctncnc
                                                                        600
etgntnnece enetenennt theetegtee ennennegen nngeanntte nengteeenn
                                                                        660
                                                                        720
tnnctcttcn ngtntcgnaa ngntcncntn tnnnnngncn ngntnntncn tccctctcnc
cnnntgnang tnnttnnnnc nengnneece nnnnennnnn nggnnntnnn tetnenenge
                                                                        780
                                                                        818
cccnnccccc ngnattaagg cctccnntct ccggccnc
      <210> 28
      <211> 731
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (731)
      <223> n = A, T, C or G
      <400> 28
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                                                                         60
tcccaacatg anggtgnngt tctcttttga angagggttg ngtttttann ccnggtgggt
                                                                        120
gattnaaccc cattgtatgg agnnaaaggn tttnagggat ttttcggctc ttatcagtat
                                                                        180
ntanatteet gtnaategga aaatnatntt tennenggaa aatnttgete eeateegnaa
                                                                        240
attnctcccg ggtagtgcat nttngggggn cngccangtt tcccaggctg ctanaatcgt
                                                                        300
actaaagntt naagtgggan tncaaatgaa aacctnncac agagnatccn tacccqactq
                                                                        360
tnnnttncct tegecetntg actetgenng ageceaatae cenngngnat gtenecengn
                                                                        420
```

nnngcgncnc tgaaannnnc tcgnggctnn gancatcang gggtttcgca tcaaaagcnn

480

```
540
cgtttcncat naaggcactt tngcctcatc caaccnctng ccctcnncca tttngccgtc
                                                                       600
ngqttenect acqctnntng encetnnntn ganattttne eegectnggg naanceteet
gnaatgggta gggncttntc ttttnaccnn gnggtntact aatcnnctnc acgcntnctt
                                                                       660
                                                                       720
tetenacee eccettttt caateecane ggenaatggg gteteecenn egangggggg
                                                                       731
nnncccannc c
      <210> 29
      <211> 822
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (822)
      <223> n = A, T, C or G
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                                                                       120
cgctcanacc tcacancete cenacnange ctataangaa nannaataga netgtnennt
                                                                       180
atntntacne teatanneet ennnaceeae teeetettaa eeentaetgt geetatngen
tnnctantct ntgccgcctn cnanccaccn gtgggccnac cncnngnatt ctcnatctcc
                                                                       240
                                                                       300
tenecatntn geetananta ngtneatace etatacetae necaatgeta nnnetaanen
                                                                       360
tccatnantt annntaacta ccactgacnt ngactttcnc atnanctcct aatttgaatc
tactctgact cccacngcct annnattagc anchtccccc nacnathtct caaccaaatc
                                                                       420
ntcaacaacc tatctanctg ttcnccaacc nttncctccg atccccnnac aacccccctc
                                                                       480
                                                                       540
ccaaataccc nccacctgac ncctaacccn caccatcccg gcaagccnan ggncatttan
ccactggaat cacnatngga naaaaaaaac ccnaactctc tancnennat ctccctaana
                                                                       600
aatneteetn naatttaetn neantneeat caaneecaen tgaaaennaa eeeetgtttt
                                                                       660
tanatecett ettteqaaaa eenaceettt annneecaae etttngggee eeceenetne
                                                                       720
                                                                       780
ccnaatqaaq qncncccaat cnangaaacg nccntgaaaa ancnaggcna anannntccg
                                                                       822
canatectat ecettanttn ggggneeett neeengggee ee
      <210> 30
      <211> 787
      <212> DNA
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      <220>
      <221> misc feature
      <222> (1) ... (787)
      <223> n = A, T, C or G
      <400> 30
                                                                         60
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ctaqaqaaqa cettetetee taetgteatt atggageeet geagaetgag ggeteeeett
                                                                        120
                                                                        180
qtctqcaqqa tttqatqtct qaaqtcqtqq aqtqtqqctt ggagctcctc atctacatna
gctggaagcc ctggagggcc tctctcgcca gcctccccct tctctccacg ctctccangg
                                                                        240
acaccagggg ctccaggcag cccattattc ccagnangac atggtgtttc tccacgcgga
                                                                        300
cccatggggc ctgnaaggcc agggtctcct ttgacaccat ctctcccgtc ctgcctggca
                                                                        360
ggccgtggga tccactantt ctanaacggn cgccaccncg gtgggagctc cagcttttgt
                                                                        420
tecenttaat gaaggttaat tgenegettg gegtaateat nggteanaac tnttteetgt
                                                                        480
                                                                        540
gtgaaattgt ttntcccctc ncnattccnc ncnacatacn aacccggaan cataaagtgt
taaagcctgg gggtngcctn nngaatnaac tnaactcaat taattgcgtt ggctcatggc
                                                                        600
ccgctttccn ttcnggaaaa ctgtcntccc ctgcnttnnt gaatcggcca cccccnggg
                                                                        660
aaaagcggtt tgcnttttng ggggntcctt ccncttcccc cctcnctaan ccctncqcct
                                                                        720
cggtcgttnc nggtngcggg gaangggnat nnnctcccnc naagggggng agnnngntat
                                                                        780
                                                                        787
ccccaaa
```

```
<210> 31
     <211> 799
      <212> DNA
     <213> Homo sapien
     <220>
     <221> misc feature
     <222> (1)...(799)
     <223> n = A, T, C or G
      <400> 31
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tttttttttt tttttttggc gatgctactg tttaattgca ggaggtgggg gtgtgtgtac
                                                                     120
catqtaccag ggctattaga agcaagaagg aaggagggag ggcagagcgc cctgctgagc
                                                                     180
aacaaaqqac teetqeaqee ttetetgtet gtetettgge geaggeacat ggggaggeet
cccgcagggt gggggccacc agtccagggg tgggagcact acanggggtg ggagtgggtg
                                                                     240
gtggctggtn cnaatggcct gncacanatc cctacgattc ttgacacctg gatttcacca
                                                                     300
ggggaccttc tgttctccca nggnaacttc ntnnatctcn aaagaacaca actgtttctt
                                                                     360
cngcanttct ggctgttcat ggaaagcaca ggtgtccnat ttnggctggg acttggtaca
                                                                     420
tatggttccg gcccacctct cccntcnaan aagtaattca ccccccccn ccntctnttg
                                                                     480
cctgggccct taantaccca caccggaact canttantta ttcatcttng gntgggcttg
                                                                     540
ntnatcnccn cctgaangcg ccaagttgaa aggccacgcc gtncccnctc cccatagnan
                                                                     600
nttttnnent canctaatge eeceeengge aacnateeaa teeceeecen tgggggeeec
                                                                     660
agcccangge eccegneteg ggnnneengn enegnantee ecaggntete ecantengne
                                                                     720
                                                                     780
connigence eccepaced gaacanaagg ntngageene egeanninnin nggtinenae
                                                                     799
ctcgccccc ccnncgnng
      <210> 32
      <211> 789
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(789)
      <223> n = A, T, C or G
      <400> 32
60
ttttnccnag ggcaggttta ttgacaacct cncgggacac aancaggctg gggacaggac
                                                                     120
                                                                     180
ggcaacaggc teeggeggeg geggeggegg cectacetge ggtaceaaat ntgcageete
cgctcccgct tgatnttcct ctgcagctgc aggatgccnt aaaacagggc ctcggccntn
                                                                     240
ggtgggcacc ctgggatttn aatttccacg ggcacaatgc ggtcgcancc cctcaccacc
                                                                     300
nattaggaat agtggtntta cccnccnccg ttggcncact ccccntggaa accacttntc
                                                                     360
                                                                     420
gcggctccgg catctggtct taaaccttgc aaacnctggg gccctctttt tggttantnt
                                                                     480
ncongecaca atcatnacte agactggene gggetggece caaaaaanen ceccaaaace
                                                                     540
qqnccatqtc ttnncgqgqt tgctgcnatn tncatcacct cccgggcnca ncaggncaac
ccaaaagttc ttgnggcccn caaaaaanct ccggggggnc ccagtttcaa caaagtcatc
                                                                     600
ccccttggcc cccaaatcct cccccgntt nctgggtttg ggaacccacg cctctnnctt
                                                                     660
tggnnggcaa gntggntecc cettegggee eeeggtggge eennetetaa ngaaaaenee
                                                                     720
ntectnnnca ecatecece nngnnaegne tancaangna teeettttt tanaaaeggg
                                                                     780
                                                                     789
cccccncg
      <210> 33
      <211> 793
      <212> DNA
      <213> Homo sapien
```

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<220>
     <221> misc feature
     <222> (1)...(793)
     <223> n = A, T, C or G
     <400> 33
                                                                        60
qacaqaacat qttqqatqqt qqagcacctt tctatacgac ttacaggaca gcagatgggg
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aattcatqqc tqttqqaqca atanaacccc agttctacga gctgctgatc aaaggacttg
                                                                       180
qactaaaqtc tqatqaactt cccaatcaga tgagcatgga tgattggcca gaaatgaana
                                                                       240
agaagtttgc agatgtattt gcaaagaaga cgaaggcaga gtggtgtcaa atctttgacg
qcacagatgc ctgtgtgact ccggttctga cttttgagga ggttgttcat catgatcaca
                                                                       300
acaangaacg gggctcgttt atcaccantg aggagcagga cgtgagcccc cgccctgcac
                                                                       360
ctctqctqtt aaacacccca qccatccctt ctttcaaaag ggatccacta cttctagagc
                                                                       420
ggncgccacc gcggtggagc tccagctttt gttcccttta gtgagggtta attgcgcgct
                                                                       480
tggcgtaatc atggtcatan ctgtttcctg tgtgaaattg ttatccgctc acaattccac
                                                                       540
acaacatacg anccggaagc atnaaatttt aaagcctggn ggtngcctaa tgantgaact
                                                                       600
nactcacatt aattggcttt gcgctcactg cccgctttcc agtccggaaa acctgtcctt
                                                                       660
                                                                       720
qccaqctqcc nttaatqaat enggccaccc cccggggaaa aggengtttg cttnttgggg
                                                                       780
egenetteee getttetege tteetgaant cetteeeee ggtetttegg ettgeggena
                                                                       793
acggtatcna cct
      <210> 34
      <211> 756
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(756)
     <223> n = A, T, C or G
      <400> 34
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ancaagtgcg gggaanagct gggtcgactc aagctagttc ttctggagct caacttcttg
                                                                       120
ccaaccacag ggaccaagct gaccaaacag cagctaattc tggcccgtga catactggag
                                                                       180
atcqqqqccc aatqqaqcat cctacqcaan gacatcccct ccttcqaqcq ctacatgqcc
                                                                       240
cageteaaat getactaett tgattacaan gageagetee eegagteage etatatgeae
                                                                       300
cagetettgg gcctcaacct cetetteetg etgteecaga acegggtgge tgantnecae
                                                                       360
acqqanttqq ancqqctqcc tqcccaanga catacanacc aatqtctaca tcnaccacca
                                                                       420
qtqtcctqqa qcaatactqa tqqanggcag ctaccncaaa gtnttcctgg ccnagggtaa
                                                                       480
catececege egagagetae acettettea ttgacatect getegacaet atcagggatg
                                                                       540
aaaatcqcnq qqttqctcca qaaaqqctnc aanaanatcc ttttcnctga aggcccccgg
                                                                       600
athenetagt netagaateg geeegecate geggtggane etceaacett tegttneeet
                                                                       660
ttactgaggg ttnattgccg cccttggcgt tatcatggtc acnccngttn cctgtgttga
                                                                       720
aattnttaac ccccacaat tccacqccna cattng
                                                                       756
      <210> 35
      <211> 834
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(834)
      <223> n = A, T, C or G
```

```
<400> 35
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ggggatctct anatchacct gnatgcatgg ttgtcggtgt ggtcgctgtc gatgaanatg
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aacaggatct tgcccttgaa gctctcggct gctgtnttta agttgctcag tctgccgtca
                                                                       180
tagtcagaca cnctcttggg caaaaaacan caggatntga gtcttgattt cacctccaat
aatcttengg getgtetget eggtgaacte gatgaenang ggeagetggt tgtgtntgat
                                                                       240
aaantccanc angtteteet tggtgacete eeetteaaag ttgtteegge etteateaaa
                                                                       300
                                                                       360
cttctnnaan angannance canctttgtc gagctggnat ttgganaaca cgtcactgtt
ggaaactgat cccaaatggt atgtcatcca tcgcctctgc tgcctgcaaa aaacttgctt
                                                                       420
                                                                       480
ggeneaaate egacteecen teettgaaag aageenatea eacceecete eetggaetee
                                                                       540
nncaangact ctnccqctnc cccntccnng cagggttggt ggcanncegg gcccntgcgc
                                                                       600
ttetteagee agtteaenat ntteateage eestetgeea getgttntat teettggggg
ggaanccgtc tctcccttcc tgaannaact ttgaccgtng gaatagccgc gcntcnccnt
                                                                       660
acntnctggg ccgggttcaa antccctccn ttgncnntcn cctcgggcca ttctggattt
                                                                       720
nccnaacttt ttccttcccc cnccccncgg ngtttggntt tttcatnggg ccccaactct
                                                                       780
                                                                       834
gctnttggcc antecectgg gggentntan enceceetnt ggtccentng ggcc
      <210> 36
      <211> 814
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(814)
      <223> n = A, T, C or G
      <400> 36
                                                                         60
cggncgcttt ccngccgcgc cccgtttcca tgacnaaggc tcccttcang ttaaatacnn
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cctagnaaac attaatgggt tgctctacta atacatcata cnaaccagta agcctgccca
naacgccaac tcaggccatt cctaccaaag gaagaaaggc tggtctctcc accccctgta
                                                                       180
                                                                       240
qqaaaqqcct qccttqtaaq acaccacaat ncggctgaat ctnaagtctt gtgttttact
aatggaaaaa aaaaataaac aanaggtttt gttctcatgg ctgcccaccg cagcctggca
                                                                        300
ctaaaacanc ccagcgctca cttctgcttg ganaaatatt ctttgctctt ttggacatca
                                                                        360
                                                                        420
qqcttqatqq tatcactqcc acntttccac ccagctgggc ncccttcccc catntttgtc
                                                                        480
antganctgg aaggeetgaa nettagtete caaaagtete ngeecacaag accggeeace
                                                                        540
aggggangtc ntttncagtg gatctgccaa anantacccn tatcatcnnt gaataaaaag
                                                                        600
qccctqaac ganatgcttc cancancett taagacccat aateetngaa ccatggtgcc
cttccggtct gatccnaaag gaatgttcct gggtcccant ccctcctttg ttncttacgt
                                                                        660
tgtnttggac centgetngn atnacecaan tganatecec ngaagcacec tneceetgge
                                                                        720
atttganttt entaaattet etgeeetaen netgaaagea enatteeetn ggeneenaan
                                                                        780
                                                                        814
ggngaactca agaaggtctn ngaaaaacca cncn
      <210> 37
      <211> 760
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(760)
      <223> n = A, T, C or G
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                                                                         60
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gcgcagtgtt cgctgaaggg gttgtagtac cagcgcggga tgctctcctt gcagagtcct
                                                                        120
gtqtctqqca qqtccacqca atgccctttg tcactgggga aatggatgcg ctggagctcg
                                                                        180
                                                                        240
tenaanceae teqtqtattt tteacangea geeteeteeg aagenteegg geagttgggg
```

300

```
gtgtcgtcac actccactaa actgtcgatn cancagccca ttgctgcagc ggaactgggt
gggctgacag gtgccagaac acactggatn ggcctttcca tggaagggcc tgggggaaat
                                                                       360
cncctnance caaactgeet eteaaaggee acettgeaca eecegacagg etagaaatge
                                                                       420
actettette ccaaaggtag ttgttettgt tgeccaagea neetecanea aaccaaaane
                                                                       480
ttgcaaaatc tgctccgtgg gggtcatnnn taccanggtt ggggaaanaa acccggcngn
                                                                       540
gancencett gtttgaatge naaggnaata atecteetgt ettgettggg tggaanagea
                                                                       600
caattgaact gttaacnttg ggccgngttc cnctngggtg gtctgaaact aatcaccqtc
                                                                       660
                                                                       720
actggaaaaa ggtangtgcc ttccttgaat tcccaaantt cccctngntt tgggtnnttt
                                                                       760
ctcctctncc ctaaaaatcg tnttcccccc ccntanggcg
      <210> 38
      <211> 724
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(724)
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                                                                        60
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                                                                       120
cttccnaaat tgtccaaccc cctcnnccaa atnnccattt ccgggggggg gttccaaacc
                                                                       180
caaattaatt ttqqanttta aattaaatnt tnattngggg aanaanccaa atgtnaagaa
                                                                       240
aatttaaccc attatnaact taaatncctn gaaacccntg gnttccaaaa atttttaacc
                                                                       300
cttaaatccc tccgaaattg ntaanggaaa accaaattcn cctaaggctn tttgaaggtt
ngatttaaac ccccttnant tnttttnacc cnngnctnaa ntatttngnt tccggtgttt
                                                                       360
                                                                       420
tcctnttaan cntnggtaac tcccgntaat gaannnccct aanccaatta aaccgaattt
tttttgaatt ggaaattccn ngggaattna ccggggtttt tcccntttgg gggccatncc
                                                                       480
cccnctttcg gggtttgggn ntaggttgaa ttttnnang ncccaaaaaa ncccccaana
                                                                       540
                                                                       600
aaaaaactcc caagnnttaa ttngaatntc ccccttccca ggccttttgg gaaaggnggg
tttntggggg ccngggantt cnttcccccn ttnccncccc cccccnggt aaanggttat
                                                                       660
ngnntttggt ttttgggccc cttnanggac cttccggatn gaaattaaat ccccgggncg
                                                                       720
                                                                       724
gccg
      <210> 39
      <211> 751
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(751)
      <223> n = A, T, C or G
      <400> 39
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                                                                       120
caacacaata tttatttcat ttgtttcttt tatttcattt tatttgtttg ctgctgctgt
                                                                       180
tttatttatt tttactgaaa gtgagaggga acttttgtgg ccttttttcc ttttctgta
ggccgcctta agctttctaa atttggaaca tctaagcaag ctgaanggaa aagggggttt
                                                                       240
cgcaaaatca ctcgggggaa nggaaaggtt gctttgttaa tcatgcccta tggtgggtga
                                                                       300
                                                                       360
ttaactqctt gtacaattac ntttcacttt taattaattg tgctnaangc tttaattana
cttgggggtt ccctccccan accaaccccn ctgacaaaaa gtgccngccc tcaaatnatg
                                                                       420
teceggennt enttgaaaca caengengaa ngtteteatt nteceenene caggtnaaaa
                                                                       480
tgaagggtta ccatntttaa cnccacctcc acntggcnnn gcctgaatcc tcnaaaancn
                                                                       540
ccctcaancn aattnotnng ccccggtcnc gentnngtcc cncccgggct ccgggaantn
                                                                       600
                                                                       660
cacceenga annenntnne naacnaaatt eegaaaatat teeenntene teaatteeee
```

cnnagactnt cetennenan encaatttte ttttnnteae gaaenegnne ennaaaatgn nnnneneete enetngteen naateneean e	720 751
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<210> 41 <211> 341 <212> DNA <213> Homo sapien	
<pre>&lt;400&gt; 41 actatatcca tcacaacaga catgcttcat cccatagact tcttgacata gcttcaaatg agtgaaccca tccttgattt atatacatat atgttctcag tattttggga gcctttccac ttctttaaac cttgttcatt atgaacactg aaaataggaa tttgtgaaga gttaaaaagt tatagcttgt ttacgtagta agtttttgaa gtctacattc aatccagaca cttagttgag tgttaaactg tgatttttaa aaaatatcat ttgagaatat tctttcagag gtattttcat ttttactttt tgattaattg tgttttatat attagggtag t</pre>	60 120 180 240 300 341
<210> 42 <211> 101 <212> DNA <213> Homo sapien	
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<210> 43 <211> 305 <212> DNA <213> Homo sapien	
<400> 43 acatetttgt taeagtetaa gatgtgttet taaateaeea tteetteetg gteeteaeee	60

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tccagggtgg tctcacactg taattagagc tattgaggag tctttacagc aaattaagat
                                                                       120
tcagatgcct tgctaagtct agagttctag agttatgttt cagaaagtct aagaaaccca
                                                                       180
cctcttgaga ggtcagtaaa gaggacttaa tatttcatat ctacaaaatg accacaggat
                                                                       240
                                                                       300
tggatacaga acgagagtta tcctggataa ctcagagctg agtacctgcc cgggggccgc
                                                                       305
tcgaa
      <210> 44
      <211> 852
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(852)
      <223> n = A, T, C or G
      <400> 44
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                                                                         60
                                                                        120
gattatttgg tgtgtgtttt ggtttgtgtc caaagtattg gcagcttcag ttttcatttt
ctctccatcc tcgggcattc ttcccaaatt tatataccag tcttcgtcca tccacacgct
                                                                        180
ccagaatttc tcttttgtag taatatctca tagctcggct gagcttttca taggtcatgc
                                                                        240
                                                                        300
tqctqttqtt cttctttta ccccataget gagccactgc ctctgatttc aagaacctga
                                                                        360
agacgcctc agatcggtct tcccatttta ttaatcctgg gttcttgtct gggttcaaga
ggatgtcgcg gatgaattcc cataagtgag tccctctcgg gttgtgcttt ttggtgtggc
                                                                        420
                                                                        480
acttggcagg ggggtcttgc tcctttttca tatcaggtga ctctgcaaca ggaaggtgac
tggtggttgt catggagatc tgagcccggc agaaagtttt gctgtccaac aaatctactg
                                                                        540
tgctaccata gttggtgtca tataaatagt tctngtcttt ccaggtgttc atgatggaag
                                                                        600
qctcaqtttq ttcaqtcttg acaatgacat tgtgtgtgga ctggaacagg tcactactgc
                                                                        660
                                                                        720
actggccgtt ccacttcaga tgctgcaagt tgctgtagag gagntgcccc gccgtccctg
                                                                        780
ccgcccgggt gaactcctgc aaactcatgc tgcaaaggtg ctcgccgttg atgtcgaact
                                                                        840
cntqqaaaqq qatacaattq gcatccagct ggttggtgtc caggaggtga tggagccact
                                                                        852
cccacacctg gt
      <210> 45
      <211> 234
      <212> DNA
      <213> Homo sapien
      <400> 45
                                                                         60
acaacagacc cttgctcgct aacgacctca tgctcatcaa gttggacgaa tccgtgtccg
agtotgacac cateeggage ateageattg ettegeagtg ecetacegeg gggaactett
                                                                        120
                                                                        180
qcctcqtttc tqqctggggt ctgctggcga acggcagaat gcctaccgtg ctgcagtgcg
                                                                        234
tgaacgtgtc ggtggtgtct gaggaggtct gcagtaagct ctatgacccg ctgt
      <210> 46
      <211> 590
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(590)
      <223> n = A, T, C or G
      <400> 46
                                                                         60
actttttatt taaatgttta taaggcagat ctatgagaat gatagaaaac atggtgtgta
                                                                        120
atttqataqc aatattttgg agattacaga gttttagtaa ttaccaatta cacagttaaa
```

```
aagaagataa tatattocaa goanatacaa aatatotaat gaaagatoaa ggoaggaaaa
                                                                       180
tgantataac taattgacaa tggaaaatca attttaatgt gaattgcaca ttatccttta
                                                                       240
aaagctttca aaanaaanaa ttattgcagt ctanttaatt caaacagtgt taaatggtat
                                                                       300
caggataaan aactgaaggg canaaagaat taattttcac ttcatqtaac ncacccanat
                                                                       360
ttacaatqqc ttaaatqcan qqaaaaaqca qtqqaaqtaq qqaaqtantc aaqqtctttc
                                                                       420
tggtctctaa tctgccttac tctttgggtg tggctttgat cctctggaga cagctgccag
                                                                       480
ggctcctgtt atatccacaa tcccagcagc aagatgaagg gatgaaaaag gacacatgct
                                                                       540
                                                                       590
gccttccttt gaggagactt catctcactg gccaacactc agtcacatgt
      <210> 47
      <211> 774
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(774)
      <223> n = A, T, C or G
      <400> 47
                                                                        60
acaagggggc ataatgaagg agtggggana gattttaaag aaggaaaaaa aacgaggccc
tgaacagaat tttcctgnac aacggggctt caaaataatt ttcttgggga ggttcaaqac
                                                                       120
gcttcactgc ttgaaactta aatggatgtg ggacanaatt ttctgtaatg accctgaggg
                                                                       180
cattacaqac qqqactctqq qaqqaaqqat aaacaqaaaq qqqacaaaqq ctaatcccaa
                                                                       240
aacatcaaag aaaggaaggt ggcgtcatac ctcccagcct acacagttct ccagggctct
                                                                       300
cctcatccct ggaggacgac agtggaggaa caactgacca tgtccccagg ctcctgtgtg
                                                                       360
                                                                       420
ctggctcctg gtcttcagcc cccagctctg gaagcccacc ctctgctgat cctgcgtggc
ccacactect tgaacacaca tecccaggtt atatteetgg acatggetga accteetatt
                                                                       480
cctacttccg agatgccttg ctcctgcag cctgtcaaaa tcccactcac cctccaaacc
                                                                       540
acggcatggg aagcctttct gacttgcctg attactccag catcttggaa caatccctga
                                                                       600
ttccccactc cttagaggca agatagggtg gttaagagta gggctggacc acttggagcc
                                                                       660
aggetgetgg etteaaattn tggeteattt acgagetatg ggacettggg caagtnatet
                                                                       720
                                                                       774
tcacttctat gggcntcatt ttgttctacc tgcaaaatgg gggataataa tagt
      <210> 48
      <211> 124
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (124)
      <223> n = A, T, C or G
      <400> 48
canaaattga aattttataa aaaggcattt ttctcttata tccataaaat gatataattt
                                                                        60
                                                                       120
ttgcaantat anaaatgtgt cataaattat aatgtteett aattacaget caacqcaact
tggt
                                                                       124
      <210> 49
      <211> 147
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(147)
```

```
<223> n = A, T, C \text{ or } G
      <400> 49
gccgatgcta ctattttatt gcaggaggtg ggggtgtttt tattattctc tcaacagctt
                                                                         60
tgtggctaca ggtggtgtct gactgcatna aaaanttttt tacgggtgat tgcaaaaatt
                                                                        120
ttagggcacc catatcccaa gcantgt
                                                                        147
      <210> 50
      <211> 107
      <212> DNA
      <213> Homo sapien
      <400> 50
                                                                         60
acattaaatt aataaaagga ctgttggggt tctgctaaaa cacatggctt gatatattgc
                                                                        107
atggtttgag gttaggagga gttaggcata tgttttggga gaggggt
      <210> 51
      <211> 204
      <212> DNA
      <213> Homo sapien
      <400> 51
                                                                         60
qtcctaggaa qtctagggga cacacgactc tggggtcacq gggccgacac acttgcacgg
                                                                        120
cqqqaaqqaa aggcagagaa gtgacaccgt cagggggaaa tgacagaaag gaaaatcaag
                                                                        180
qccttqcaag qtcagaaagg ggactcaggg cttccaccac agccctgccc cacttggcca
                                                                        204
cctccctttt gggaccagca atgt
      <210> 52
      <211> 491
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(491)
      <223> n = A, T, C or G
      <400> 52
acaaagataa catttatctt ataacaaaaa tttgatagtt ttaaaggtta gtattgtgta
                                                                         60
gggtattttc caaaagacta aagagataac tcaggtaaaa agttagaaat gtataaaaca
                                                                        120
ccatcagaca ggtttttaaa aaacaacata ttacaaaatt agacaatcat ccttaaaaaa
                                                                        180
aaaacttctt gtatcaattt cttttgttca aaatgactga cttaantatt tttaaatatt
                                                                        240
tcanaaacac ttcctcaaaa attttcaana tggtagcttt canatgtncc ctcagtccca
                                                                        300
                                                                        360
atgttgctca gataaataaa tctcgtgaga acttaccacc caccacaagc tttctggggc
atgcaacagt gtctttctt tnctttttct ttttttttt ttacaggcac agaaactcat
                                                                        420
                                                                        480
caattttatt tggataacaa agggtctcca aattatattg aaaaataaat ccaagttaat
                                                                        491
atcactcttg t
      <210> 53
      <211> 484
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(484)
      <223> n = A, T, C or G
```

<400>	> 53					
gtattaacag actacagaac caatcaaatc gcactagtat agctttgant aatgattggc	ttgctgaagt ccttaaggac tctacataac anaccgctcc ttctttgtgc aggtcnggta	ttaccataag ttggtattt actgaaaatt actatagtaa tgtcaggata tgatangagg aatnccaaaa caggancagg	tatgcagcat agtaagtaaa ttaaaacgtt anactgcttt aaaggctgaa catattccaa	tttcttttg gttcagaaac aaaaaaagt ggaacagaaa ttaccttgtt ctcaacactt	ctttgataac attagctgct gttgaaatct gggaaaaanc gcctctccct cttttccncg	60 120 180 240 300 360 420 480 484
		∍n				
ccactgggta	gtgcttgtga tactgctgac	actccataca aaccgcaaca tttttgtttg	acaaaaacac			60 120 15 <b>1</b>
		en				
	tctccgggtg	gttcccggcg gccaaagtgg		tccccagaac	ggacactttc	60 91
		en				
	cgttggttat gtatctgtgg	atacaaatat gttgggggga				60 120 133
		en				
<222	> misc_feat > (1)(14' > n = A,T,C	7)				
gactgggagc	acctgagccg	ctgctccgcc cctttgcgcc gcagggt				60 120 147

```
<211> 198
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(198)
      <223> n = A, T, C or G
      <400> 58
acagggatat aggtttnaag ttattgtnat tgtaaaatac attgaatttt ctgtatactc
                                                                         60
tgattacata catttatcct ttaaaaaaga tgtaaatctt aatttttatg ccatctatta
                                                                        120
atttaccaat gagttacctt gtaaatgaga agtcatgata gcactgaatt ttaactagtt
                                                                        180
                                                                        198
ttgacttcta agtttggt
      <210> 59
      <211> 330
      <212> DNA
      <213> Homo sapien
      <400> 59
                                                                         60
acaacaaatq ggttqtqaqq aagtcttatc agcaaaactg gtgatggcta ctgaaaagat
                                                                        120
ccattgaaaa ttatcattaa tgattttaaa tgacaagtta tcaaaaactc actcaatttt
                                                                        180
cacctgtgct agcttgctaa aatgggagtt aactctagag caaatatagt atcttctgaa
tacagtcaat aaatgacaaa gccagggcct acaggtggtt tccagacttt ccagacccag
                                                                        240
                                                                        300
cagaaggaat ctattttatc acatggatct ccgtctgtgc tcaaaatacc taatgatatt
                                                                        330
tttcgtcttt attggacttc tttgaagagt
      <210> 60
      <211> 175
      <212> DNA
      <213> Homo sapien
      <400> 60
accgtgggtg cettetacat teetgaegge teetteacea acatetggtt etacttegge
                                                                         60
gtcgtgggct cettectett catecteate cagetggtge tgctcatega etttgegeae
                                                                        120
                                                                        175
tectggaace ageggtgget gggeaaggee gaggagtgeg attecegtge etggt
      <210> 61
      <211> 154
      <212> DNA
      <213> Homo sapien
      <400> 61
accecacttt teeteetgtg ageagtetgg actteteact getacatgat gagggtgagt
                                                                         60
ggttgttgct cttcaacagt atcctcccct ttccggatct gctgagccgg acagcagtgc
                                                                        120
                                                                        154
tggactgcac agccccgggg ctccacattg ctgt
      <210> 62
      <211> 30
      <212> DNA
      <213> Homo sapien
      <400> 62
                                                                         30
cgctcgagcc ctatagtgag tcgtattaga
      <210> 63
```

```
<211> 89
      <212> DNA
      <213> Homo sapien
      <400> 63
acaagtcatt tcagcaccct ttgctcttca aaactgacca tcttttatat ttaatgcttc
                                                                         60
                                                                         89
ctgtatgaat aaaaatggtt atgtcaagt
      <210> 64
      <211> 97
      <212> DNA
      <213> Homo sapien
      <400> 64
accggagtaa ctgagtcggg acgctgaatc tgaatccacc aataaataaa ggttctgcag
                                                                         60
                                                                         97
aatcagtgca tccaggattg gtccttggat ctggggt
      <210> 65
      <211> 377
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(377)
      <223> n = A, T, C or G
      <400> 65
acaacaanaa ntcccttctt taggccactg atggaaacct ggaaccccct tttgatggca
                                                                         60
gcatggcgtc ctaggccttg acacagcggc tggggtttgg gctntcccaa accgcacacc
                                                                        120
ccaaccetgg tetacceaca nttetggeta tgggetgtet etgecaetga acateagggt
                                                                        180
teggteataa natgaaatee caanggggae agaggteagt agaggaaget caatgagaaa
                                                                        240
ggtgctgttt gctcagccag aaaacagctg cctggcattc gccgctgaac tatgaacccg
                                                                        300
                                                                        360
tgggggtgaa ctacccccan gaggaatcat gcctgggcga tgcaanggtg ccaacaggag
                                                                        377
gggcgggagg agcatgt
      <210> 66
      <211> 305
      <212> DNA
      <213> Homo sapien
      <400> 66
acgcetttee etcagaatte agggaagaga etgtegeetg eetteeteeg ttgttgegtg
                                                                         60
agaaccegtg tgccccttcc caccatatcc accetcgctc catctttgaa ctcaaacacg
                                                                        120
aggaactaac tgcaccetgg teeteteece agteeceagt teacceteea teeteacet
                                                                        180
tectecacte taagggatat caacactgee cageacaggg geeetgaatt tatgtggttt
                                                                        240
ttatatattt tttaataaga tgcactttat gtcatttttt aataaagtct gaagaattac
                                                                        300
tgttt
                                                                        305
      <210> 67
      <211> 385
      <212> DNA
      <213> Homo sapien
      <400> 67
actacacaca ctccacttgc ccttgtgaga cactttgtcc cagcacttta ggaatgctga
                                                                         60
ggtcggacca gccacatctc atgtgcaaga ttgcccagca gacatcaggt ctgagagttc
                                                                        120
```

```
cccttttaaa aaaqqqqact tqcttaaaaa agaagtctag ccacgattgt gtagagcagc
                                                                       180
                                                                       240
tqtqctqtqc tqqaqattca cttttqaqaq aqttctcctc tgagacctga tctttagagg
                                                                       300
ctgggcagtc ttgcacatga gatggggctg gtctgatctc agcactcctt agtctgcttg
ceteteceag ggeeceagee tggeeacace tgettacagg geacteteag atgeceatae
                                                                       360
                                                                       385
catagtttct gtgctagtgg accgt
      <210> 68
      <211> 73
      <212> DNA
      <213> Homo sapien
      <400> 68
acttaaccag atatatttt accccagatg gggatattct ttgtaaaaaa tgaaaataaa
                                                                         60
                                                                         73
gtttttttaa tgg
      <210> 69
      <211> 536
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (536)
      <223> n = A, T, C or G
      <400> 69
actaqtccaq tgtggtggaa ttccattgtg ttgggggctc tcaccctcct ctcctgcagc
                                                                         60
tocagctttg tgctctgcct ctgaggagac catggcccag catctgagta ccctgctgct
                                                                        120
cctgctggcc accctagctg tggccctggc ctggagcccc aaggaggagg ataggataat
                                                                        180
cccgggtggc atctataacg cagacctcaa tgatgagtgg gtacagcgtg cccttcactt
                                                                        240
cgccatcagc gagtataaca aggccaccaa agatgactac tacagacgtc cgctgcgggt
                                                                        300
actaagagcc aggcaacaga ccgttggggg ggtgaattac ttcttcgacg tagaggtggg
                                                                        360
ccqaaccata totaccaaqt cccaqcccaa cttqqacacc tqtqccttcc atgaacagcc
                                                                        420
                                                                        480
aqaactqcaq aaqaaacaqt tqtqctcttt cqaqatctac gaagttccct ggggagaaca
qaanqtccct qqqtqaaatc caqqtqtcaa qaaatcctan ggatctgttg ccaggc
                                                                        536
      <210> 70
      <211> 477
      <212> DNA
      <213> Homo sapien
      <400> 70
                                                                         60
atgaccecta acaggggece teteagecet cetaatgace teeggeetag ceatgtgatt
tcacttccac tccataacqc tcctcatact aggcctacta accaacacac taaccatata
                                                                        120
                                                                        180
ccaatgatgg cgcqatgtaa cacqaqaaag cacataccaa ggccaccaca caccacctgt
ccaaaaaaggc cttcgatacg ggataatcct atttattacc tcagaagttt ttttcttcgc
                                                                        240
agggattttt ctgagccttt taccactcca gcctagcccc taccccccaa ctaggagggc
                                                                        300
actggcccc aacaggcatc accccgctaa atcccctaga agtcccactc ctaaacacat
                                                                        360
                                                                        420
ccgtattact cgcatcagga gtatcaatca cctgagetca ccatagtcta atagaaaaca
accgaaacca aattattcaa agcactgctt attacaattt tactgggtct ctatttt
                                                                        477
      <210> 71
      <211> 533
      <212> DNA
      <213> Homo sapien
      <220>
```

```
<221> misc feature
      <222> (1)...(533)
      <223> n = A, T, C or G
      <400> 71
agagetatag gtacagtgtg ateteagett tgeaaacaca ttttetacat agatagtact
                                                                      60
aggtattaat agatatgtaa agaaagaaat cacaccatta ataatggtaa gattggttta
                                                                     120
tgtgatttta gtggtatttt tggcaccctt atatatgttt tccaaacttt cagcagtgat
                                                                     180
                                                                     240
attatttcca taacttaaaa agtgagtttg aaaaagaaaa tctccagcaa gcatctcatt
taaataaagg tttgtcatct ttaaaaatac agcaatatgt gactttttaa aaaagctgtc
                                                                     300
aaataggtgt gaccctacta ataattatta gaaatacatt taaaaacatc gagtacctca
                                                                     360
agtcagtttg ccttgaaaaa tatcaaatat aactcttaga gaaatgtaca taaaagaatg
                                                                     420
cttcgtaatt ttggagtang aggttccctc ctcaattttg tatttttaaa aagtacatgg
                                                                     480
taaaaaaaaa aattcacaac agtatataag gctgtaaaat gaagaattct gcc
                                                                     533
      <210> 72
      <211> 511
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(511)
      <223> n = A, T, C or G
      <400> 72
tattacggaa aaacacacca cataattcaa ctancaaaga anactgcttc agggcgtgta
                                                                      60
aaatgaaagg cttccaggca gttatctgat taaagaacac taaaagaggg acaaggctaa
                                                                     120
aagccgcagg atgtctacac tatancaggc gctatttggg ttggctggag gagctgtgga
                                                                     180
aaacatggan agattggtgc tgganatcgc cgtggctatt cctcattgtt attacanagt
                                                                     240
gaggttetet gtgttgeecac tggtttgaaa accgttetne aataatgata gaatagtaca
                                                                     300
cacatgagaa ctgaaatggc ccaaacccag aaagaaagcc caactagatc ctcagaanac
                                                                     360
                                                                     420
gcttctaggg acaataaccg atgaagaaaa gatggcctcc ttgtgccccc gtctgttatg
atttctctcc attgcagcna naaacccgtt cttctaagca aacncaggtg atgatggcna
                                                                     480
aaatacaccc cctcttgaag naccnggagg a
                                                                     511
      <210> 73
      <211> 499
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (499)
     <223> n = A, T, C or G
      <400> 73
cagtgccagc actggtgcca gtaccagtac caataacagt gccagtgcca gtgccagcac
                                                                      60
cagtggtggc ttcagtgctg gtgccagcct gaccgccact ctcacatttg ggctcttcgc
                                                                     120
tggccttggt ggagetggtg ccagcaccag tggcagetet ggtgcctgtg gtttctccta
                                                                     180
caagtgagat tttagatatt gttaatcctg ccagtctttc tcttcaagcc agggtgcatc
                                                                     240
ctcagaaacc tactcaacac agcactctag gcagccacta tcaatcaatt gaagttgaca
                                                                     300
360
antctagagg gcccgtttaa acccgctgat cagcctcgac tgtgccttct anttgccagc
                                                                     420
catctgttgt ttgcccctcc cccgntqcct tccttgaccc tggaaagtgc cactcccact
                                                                     480
gtcctttcct aantaaaat
                                                                     499
```

```
<210> 74
      <211> 537
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(537)
      <223> n = A, T, C or G
      <400> 74
tttcatagga gaacacactg aggagatact tgaagaattt ggattcagcc gcgaagagat
                                                                         60
ttatcagctt aactcagata aaatcattga aagtaataag gtaaaagcta gtctctaact
                                                                        120
tccaggccca cggctcaagt gaatttgaat actgcattta cagtgtagag taacacataa
                                                                       180
cattgtatgc atggaaacat ggaggaacag tattacagtg tcctaccact ctaatcaaga
                                                                       240
aaaqaattac agactctgat tctacagtga tgattgaatt ctaaaaaatgg taatcattag
                                                                       300
ggcttttgat ttataanact ttgggtactt atactaaatt atggtagtta tactgccttc
                                                                       360
caqtttqctt qatatatttq ttqatattaa qattcttgac ttatattttg aatgggttct
                                                                       420
actgaaaaan gaatgatata ttcttgaaga catcgatata catttattta cactcttgat
                                                                       480
tctacaatgt agaaaatgaa ggaaatgccc caaattgtat ggtgataaaa gtcccgt
                                                                       537
      <210> 75
      <211> 467
      <212> DNA
     <213> Homo sapien
     <220>
     <221> misc feature
     <222> (1)...(467)
     <223> n = A, T, C or G
      <400> 75
caaanacaat tgttcaaaag atgcaaatga tacactactg ctgcagctca caaacacctc
                                                                         60
tgcatattac acgtacetec teetgeteet caagtagtgt ggtetatttt gccateatea
                                                                        120
cctgctgtct gcttagaaga acggctttct gctgcaangq agagaaatca taacagacgg
                                                                        180
tggcacaagg aggccatctt ttcctcatcg gttattgtcc ctagaagcgt cttctgagga
                                                                        240
tctagttggg ctttctttct gggtttgggc catttcantt ctcatgtgtg tactattcta
                                                                        300
tcattattgt ataacggttt tcaaaccngt gggcacncag agaacctcac tctgtaataa
                                                                        360
caatgaggaa tagccacggt gatctccagc accaaatctc tccatgttnt tccagagctc
                                                                        420
ctccagccaa cccaaatagc cgctgctatn gtgtagaaca tccctgn
                                                                        467
      <210> 76
      <211> 400
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (400)
      <223> n = A, T, C or G
      <400> 76
aagetgacag cattegggee gagatgtete geteegtgge ettagetgtg etegegetae
                                                                         60
tototottto tggcctggag gctatccagc gtactccaaa gattcaggtt tactcacgtc
                                                                       120
atccagcaga gaatggaaag tcaaatttcc tgaattgcta tgtgtctggg tttcatccat
                                                                       180
ccgacattga agttgactta ctgaagaatg gagagagaat tgaaaaagtg gagcattcag
                                                                       240
acttgtcttt cagcaaggac tggtctttct atctcttgta ctacactgaa ttcaccccca
                                                                       300
```

```
360
ctgaaaaaga tgagtatgcc tgccgtgtga accatgtgac tttgtcacag cccaagatng
                                                                        400
ttnagtggga tcganacatg taagcagcan catgggaggt
      <210> 77
      <211> 248
      <212> DNA
      <213> Homo sapien
      <400> 77
                                                                         60
ctggagtgcc ttggtgtttc aagcccctgc aggaagcaga atgcaccttc tgaggcacct
ccaqctgccc cggcgggga tgcgaggctc ggagcaccct tgcccggctg tgattgctgc
                                                                        120
caggicactit teateteage tittetigtee ettigeteee ggeaageget tetigetgaaa
                                                                        180
qttcatatct qqaqcctqat qtcttaacqa ataaaqqtcc catqctccac ccgaaaaaaa
                                                                        240
                                                                        248
aaaaaaaa
      <210> 78
      <211> 201
      <212> DNA
      <213> Homo sapien
      <400> 78
                                                                         60
actagtccag tgtggtggaa ttccattgtg ttgggcccaa cacaatggct acctttaaca
teacceagae ecegecetge ecgtgeecea egetgetget aacgacagta tgatgettae
                                                                        120
tctgctactc ggaaactatt tttatgtaat taatgtatgc tttcttgttt ataaatgcct
                                                                        180
                                                                        201
gatttaaaaa aaaaaaaaa a
      <210> 79
      <211> 552
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(552)
      <223> n = A, T, C or G
      <400> 79
                                                                         60
teettttgtt aggtttttga gacaacecta gacetaaact gtgtcacaga ettetgaatg
tttaggcagt gctagtaatt tcctcgtaat gattetgtta ttactttcct attetttatt
                                                                        120
cctctttctt ctgaagatta atgaagttga aaattgaggt ggataaatac aaaaaggtag
                                                                        180
tgtgatagta taagtatcta agtgcagatg aaagtgtgtt atatatatcc attcaaaatt
                                                                        240
atgcaagtta gtaattactc agggttaact aaattacttt aatatgctgt tgaacctact
                                                                        300
ctgttccttg gctagaaaaa attataaaca ggactttgtt agtttgggaa gccaaattga
                                                                        360
taatattota tgttotaaaa gttgggotat acataaanta tnaagaaata tggaatttta
                                                                        420
ttcccaggaa tatggggttc atttatgaat antacccggg anagaagttt tgantnaaac
                                                                        480
cngttttggt taatacgtta atatgtcctn aatnaacaag gcntgactta tttccaaaaa
                                                                        540
aaaaaaaaa aa
                                                                        552
      <210> 80
      <211> 476
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(476)
      <223> n = A, T, C \text{ or } G
```

```
<400> 80
acagggattt gagatgetaa ggccccagag atcgtttgat ccaaccctct tattttcaga
                                                                         60
qqqqaaaatq qqqcctaqaa qttacaqaqc atctaqctqq tqcqctqqca cccctqqcct
                                                                        120
cacacagact cccgagtagc tgggactaca ggcacacagt cactgaagca ggccctgttt
                                                                        180
qcaattcacq ttqccacctc caacttaaac attcttcata tqtqatqtcc ttaqtcacta
                                                                        240
aggttaaact ttcccaccca gaaaaggcaa cttagataaa atcttagagt actitcatac
                                                                        300
tcttctaagt cctcttccag cctcactttq agtcctcctt qqqqqttqat agqaantntc
                                                                        360
tettggettt eteaataaaa tetetateea teteatgttt aatttggtae gentaaaaat
                                                                        420
gctgaaaaaa ttaaaatgtt ctggtttcnc tttaaaaaaa aaaaaaaaa aaaaaaa
                                                                        476
      <210> 81
      <211> 232
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(232)
      <223> n = A, T, C or G
      <400> 81
ttttttttttt tatgccntcn ctgtggngtt attgttgctg ccaccctgga ggagcccagt
                                                                         60
ttettetgta tetttettt etgggggate tteetggete tgeeceteea tteecageet
                                                                        120
ctcatcccca tcttgcactt ttgctagggt tggaggcgct ttcctggtag cccctcagag
                                                                        180
actcagtcag cgggaataag tcctaggggt ggggggtgtg gcaagccggc ct
                                                                        232
      <210> 82
      <211> 383
      <212> DNA
      <213> Homo sapien
      <220>
     <221> misc feature
     <222> (1) ... (383)
     <223> n = A, T, C or G
      <400> 82
aggogggage agaagetaaa gecaaageee aagaagagtg geagtgeeag cactqqtqee
                                                                         60
agtaccagta ccaataacat gccagtgcca gtgccagcac cagtggtggc ttcagtgctg
                                                                        120
gtgccagcct gaccgccact ctcacatttg ggctcttcgc tggccttggt ggagctggtg
                                                                        180
ccagcaccag tggcagetet ggtgcctgtg gtttctccta caagtgagat tttagatatt
                                                                        240
gttaatcctg ccagtctttc tcttcaagcc agggtgcatc ctcagaaacc tactcaacac
                                                                       300
agcactetng geagecacta teaateaatt gaagttgaca etetgeatta aatetatttg
                                                                       360
ccatttcaaa aaaaaaaaaa aaa
                                                                        383
      <210> 83
      <211> 494
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(494)
      <223> n = A, T, C or G
      <400> 83
```

```
accgaattgg gaccgctggc ttataagcga tcatgtcctc cagtattacc tcaacgagca
                                                                        60
qqqaqatcqa qtctatacqc tqaaqaaatt tqacccqatq qqacaacaqa cctqctcagc
                                                                       120
ccatcctqct cqqttctccc caqatqacaa atactctcqa caccqaatca ccatcaaqaa
                                                                       180
acqcttcaaq qtqctcatqa cccaqcaacc qcqccctqtc ctctqaqqqt ccttaaactq
                                                                       240
atgtcttttc tgccacctgt tacccctcgg agactccgta accaaactct tcggactgtg
                                                                       300
agccctqatq cctttttqcc agccatactc tttqqcntcc agtctctcqt qqcqattgat
                                                                       360
tatgcttqtq tqaqqcaatc atgqtqqcat cacccatnaa qqqaacacat ttqanttttt
                                                                       420
                                                                       480
tttcncatat tttaaattac naccagaata nttcagaata aatgaattga aaaactctta
                                                                       494
aaaaaaaaa aaaa
      <210> 84
      <211> 380
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(380)
      <223> n = A, T, C or G
      <400> 84
gctggtagcc tatggcgtgg ccacggangg gctcctgagg cacgggacag tgacttccca
                                                                        60
                                                                        120
agtatectge geogegtett etacegteee tacetgeaga tettegggea gatteeceag
qaqqacatqq acqtqqccct catqqaqcac aqcaactqct cqtcqqaqcc cqqcttctqq
                                                                       180
gcacaccctc ctggggccca ggcgggcacc tgcgtctccc agtatgccaa ctggctggtg
                                                                       240
                                                                       300
gtgctgctcc tcgtcatctt cctgctcgtg gccaacatcc tgctggtcac ttgctcattg
                                                                       360
ccatgttcag ttacacattc ggcaaagtac agggcaacag cnatctctac tgggaaggcc
                                                                       380
agcgttnccg cctcatccgg
      <210> 85
      <211> 481
      <212> DNA
     <213> Homo sapien
     <220>
     <221> misc feature
     <222> (1) ... (481)
     <223> n = A, T, C or G
      <400> 85
gagttagete etceaeaace ttgatgaggt egtetgeagt ggeetetege tteatacege
                                                                        60
tnccatcgtc atactgtagg tttgccacca cctcctgcat cttggggcgg ctaatatcca
                                                                       120
ggaaactete aateaagtea eegtenatna aacetgtgge tggttetgte tteegetegg
                                                                       180
tqtqaaaqqa tctccaqaaq qaqtqctcqa tcttccccac acttttqatq actttattqa
                                                                       240
gtcgattctg catgtccagc aggaggttgt accagctctc tgacagtgag gtcaccagcc
                                                                       300
ctatcatgcc nttgaacgtg ccgaaqaaca ccgagccttg tgtgggggt gnagtctcac
                                                                       360
ccagattctq cattaccaga nagccqtqqc aaaaqanatt qacaactcqc ccaqqnnqaa
                                                                       420
aaagaacacc tootggaagt gotngooget cotogtoont tggtggnngo gontnoottt
                                                                       480
                                                                       481
      <210> 86
      <211> 472
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
```

```
<222> (1)...(472)
      <223> n = A, T, C or G
      <400> 86
aacatcttcc tgtataatgc tgtgtaatat cgatccgatn ttgtctgctg agaattcatt
                                                                        60
acttggaaaa gcaacttnaa gcctggacac tggtattaaa attcacaata tgcaacactt
                                                                        120
taaacagtgt gtcaatctgc tcccttactt tgtcatcacc agtctgggaa taagggtatg
                                                                       180
ccctattcac acctqttaaa agggcqctaa gcatttttga ttcaacatct ttttttttga
                                                                       240
cacaagtccg aaaaaagcaa aagtaaacag ttnttaattt gttagccaat tcactttctt
                                                                       300
catgggacag agccatttga tttaaaaagc aaattgcata atattgagct ttgggagctg
                                                                       360
atatntgage ggaagantag cetttetaet teaceagaea caacteettt catattggga
                                                                       420
tgttnacnaa agttatgtct cttacagatg ggatgctttt gtggcaattc tg
                                                                        472
      <210> 87
      <211> 413
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(413)
      <223> n = A, T, C or G
      <400> 87
agaaaccagt atctctnaaa acaacctctc ataccttgtg gacctaattt tgtgtgcgtg
                                                                        60
tgtgtgtgcg cgcatattat atagacaggc acatcttttt tacttttgta aaagcttatg
                                                                        120
cctctttggt atctatatct gtgaaagttt taatgatctg ccataatgtc ttggggacct
                                                                       180
ttgtcttctg tgtaaatggt actagagaaa acacctatnt tatgagtcaa tctagttngt
                                                                       240
tttattcgac atgaaggaaa tttccagatn acaacactna caaactctcc cttgactagg
                                                                       300
ggggacaaag aaaagcanaa ctgaacatna gaaacaattn cctggtgaga aattncataa
                                                                       360
acagaaattg ggtngtatat tgaaananng catcattnaa acgtttttt ttt
                                                                       413
      <210> 88
      <211> 448
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(448)
      <223> n = A, T, C or G
      <400> 88
egeagegggt cetetetate tageteeage etetegeetg ecceaeteee egeqteeege
                                                                        60
gtectageen accatggeeg ggeeeetgeg egeeeegetg etectgetgg eeateetgge
                                                                       120
cgtggccctg gccgtgagcc ccgcggccgg ctccagtccc ggcaaqccqc cqcqcctqqt
                                                                       180
gggaggccca tggaccccgc gtggaagaag aaggtgtgcg gcgtgcactq qactttgccq
                                                                       240
teggenanta caacaaacce geaacnactt ttacenagen egegetgeag gttgtgeege
                                                                       300
cccaancaaa ttgttactng gggtaantaa ttcttggaag ttgaacctgg gccaaacnng
                                                                       360
tttaccagaa ccnagccaat tngaacaatt nececteeat aacageeeet tttaaaaaagg
                                                                       420
gaancantcc tgntcttttc caaatttt
                                                                       448
      <210> 89
      <211> 463
      <212> DNA
      <213> Homo sapien
```

<212> DNA

```
<220>
      <221> misc feature
      <222> (1)...(463)
      <223> n = A, T, C or G
      <400> 89
gaattttgtg cactggccac tgtgatggaa ccattgggcc aggatgcttt gagtttatca
                                                                         60
gtagtgattc tgccaaagtt ggtgttgtaa catgagtatg taaaatgtca aaaaattagc
                                                                        120
agaggtetag gtetgeatat cageagaeag tttgteegtg tattttgtag cettgaagtt
                                                                        180
ctcagtgaca agttnnttct gatgcgaagt tctnattcca gtgttttagt cctttgcatc
                                                                        240
tttnatgttn agacttgcct ctntnaaatt gcttttgtnt tctgcaggta ctatctgtgg
                                                                        300
tttaacaaaa tagaannact tetetgettn gaanatttga atatettaca tetnaaaatn
                                                                        360
aattetetee eeatannaaa acceangeee ttggganaat ttgaaaaang gnteettenn
                                                                        420
aattennana antteagntn teatacaaca naaenggane eee
                                                                        463
      <210> 90
      <211> 400
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(400)
      <223> n = A, T, C or G
      <400> 90
agggattgaa ggtctnttnt actgtcggac tgttcancca ccaactctac aagttgctgt
                                                                         60
cttccactca ctgtctgtaa gcntnttaac ccagactgta tcttcataaa tagaacaaat
                                                                        120
tcttcaccag tcacatcttc taggaccttt ttggattcag ttagtataag ctcttccact
                                                                        180
tcctttgtta agacttcatc tggtaaagtc ttaagttttg tagaaaggaa tttaattgct
                                                                        240
cgttctctaa caatgtcctc tccttgaagt atttggctga acaacccacc tnaagtccct
                                                                        300
ttgtgcatcc attttaaata tacttaatag ggcattggtn cactaggtta aattctgcaa
                                                                        360
gagtcatctg tctgcaaaag ttgcgttagt atatctgcca
                                                                        400
      <210> 91
      <211> 480
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(480)
      <223> n = A, T, C or G
      <400> 91
gageteggat ecaataatet ttgtetgagg geageacaea tatneagtge eatggnaact
                                                                         60
ggtctacccc acatgggagc agcatgccgt agntatataa ggtcattccc tgagtcagac
                                                                        120
atgectettt gactacegtg tgccagtget ggtgattete acacacetee nneegetett
                                                                        180
tgtggaaaaa ctggcacttg nctggaacta gcaagacatc acttacaaat tcacccacga
                                                                       240
gacacttgaa aggtgtaaca aagcgactct tgcattgctt tttgtccctc cggcaccagt
                                                                       300
tgtcaatact aacccgctgg tttgcctcca tcacatttgt gatctgtagc tctggataca
                                                                       360
tctcctgaca gtactgaaga acttcttctt ttgtttcaaa agcaactctt ggtgcctgtt
                                                                        420
ngatcaggtt cccatttccc agtccgaatg ttcacatggc atatnttact tcccacaaaa
                                                                       480
      <210> 92
      <211> 477
```

```
<213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(477)
      <223> n = A, T, C or G
      <400> 92
atacagecca nateceaeca egaagatgeg ettgttgaet gagaacetga tgeggteaet
                                                                         60
ggtcccgctg tagccccagc gactctccac ctgctggaag cggttgatgc tgcactcctt
                                                                        120
cccacgcagg cagcagcggg gccggtcaat gaactccact cgtggcttgg ggttgacggt
                                                                       180
taantgcagg aagaggctga ccacctcgcg gtccaccagg atgcccgact gtgcgggacc
                                                                       240
tgcagcgaaa ctcctcgatg gtcatgagcg ggaagcgaat gangcccagg gccttgccca
                                                                       300
gaacetteeg cetgttetet ggegteacet geagetgetg cegetnacae teggeetegg
                                                                       360
accageggae aaaeggegtt gaacageege accteaegga tgeecantgt gtegegetee
                                                                       420
aggaacggcn ccagcgtgtc caggtcaatg tcggtgaanc ctccgcgggt aatggcg
                                                                        477
      <210> 93
      <211> 377
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(377)
      <223> n = A, T, C or G
      <400> 93
gaacggctgg accttgcctc gcattgtgct gctggcagga ataccttggc aagcagctcc
                                                                         60
agtecgagea geeccagace getgeegeec gaagetaage etgeetetgg cetteecete
                                                                       120
cgcctcaatg cagaaccant agtgggagca ctgtgtttag agttaagagt gaacactgtn
                                                                       180
tgattttact tgggaatttc ctctgttata taqcttttcc caatgctaat ttccaaacaa
                                                                       240
caacaacaaa ataacatgtt tgcctgttna gttgtataaa agtangtgat tctgtatnta
                                                                       300
aagaaaatat tactgttaca tatactgctt gcaanttctg tatttattgg tnctctggaa
                                                                       360
ataaatatat tattaaa
                                                                       377
      <210> 94
      <211> 495
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(495)
      <223> n = A, T, C or G
      <400> 94
ccetttgagg ggttagggtc cagttcccag tggaagaaac aggccaggag aantgcgtgc
                                                                        60
egagetgang cagattteec acagtgacee cagageeetg ggetatagte tetgaceeet
                                                                       120
ccaaggaaag accaccttct ggggacatgg gctggagggc aggacctaga ggcaccaagg
                                                                       180
gaaggcccca ttccggggct gttccccgag gaggaaggga aggggctctg tgtgccccc
                                                                       240
acgaggaana ggccctgant cctgggatca nacacccctt cacgtgtatc cccacacaaa
                                                                       300
tgcaagctca ccaaggtccc ctctcagtcc cttccctaca ccctgaacgg ncactggccc
                                                                       360
acacccaccc agancancca cccgccatgg ggaatgtnct caaggaatcg cngggcaacg
                                                                       420
tggactctng tcccnnaagg gggcagaatc tccaatagan gganngaacc cttgctnana
                                                                       480
aaaaaaana aaaaa
                                                                       495
```

```
<210> 95
      <211> 472
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (472)
      <223> n = A, T, C or G
      <400> 95
ggttacttgg tttcattgcc accacttagt ggatgtcatt tagaaccatt ttgtctgctc
                                                                         60
cctctggaag ccttgcgcag agcggacttt gtaattgttg gagaataact gctgaatttt
                                                                        120
tagetgitti gagttgatte geaccaetge accaeacte aatatgaaaa etatttnact
                                                                        180
tatttattat cttgtgaaaa gtatacaatg aaaattttgt tcatactgta tttatcaagt
                                                                        240
atgatgaaaa gcaatagata tatattettt tattatgttn aattatgatt gecattatta
                                                                        300
atcqqcaaaa tqtqqaqtqt atqttctttt cacaqtaata tatqcctttt gtaacttcac
                                                                        360
                                                                        420
ttqqttattt tattqtaaat qaattacaaa attcttaatt taaqaaaatg qtanqttata
tttanttcan taatttcttt ccttgtttac gttaattttg aaaagaatgc at
                                                                        472
      <210> 96
      <211> 476
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(476)
      <223> n = A, T, C or G
      <400> 96
ctgaagcatt tcttcaaact tntctacttt tgtcattgat acctgtagta agttgacaat
                                                                         60
gtggtgaaat ttcaaaatta tatgtaactt ctactagttt tactttctcc cccaagtctt
                                                                        120
ttttaactca tgatttttac acacacaatc cagaacttat tatatagcct ctaagtcttt
                                                                        180
attetteaca gtagatgatg aaagagteet ecagtgtett gngcanaatg ttetagntat
                                                                        240
agctggatac atacngtggg agttctataa actcatacct cagtgggact naaccaaaat
                                                                        300
tgtgttagtc tcaattccta ccacactgag ggagcctccc aaatcactat attcttatct
                                                                        360
                                                                        420
gcaggtactc ctccagaaaa acngacaggg caggettgca tgaaaaagtn acatctgegt
tacaaagtct atcttcctca nangtctgtn aaggaacaat ttaatcttct agcttt
                                                                        476
      <210> 97
      <211> 479
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (479)
      <223> n = A, T, C or G
      <400> 97
actctttcta atgctgatat gatcttgagt ataagaatgc atatgtcact agaatggata
                                                                         60
aaataatgct gcaaacttaa tgttcttatg caaaatggaa cgctaatgaa acacagctta
                                                                        120
caatcqcaaa tcaaaactca caagtgctca tctgttgtag atttagtgta ataagactta
                                                                        180
gattgtgctc cttcggatat gattgtttct canatcttgg gcaatnttcc ttagtcaaat
                                                                        240
caggctacta gaattctgtt attggatatn tgagagcatg aaatttttaa naatacactt
                                                                        300
gtgattatna aattaatcac aaatttcact tatacctgct atcagcagct agaaaaacat
                                                                        360
```

ntnnttttta natcaaagta ttcnatctta ttttttcccn					420 479
<210> 98 <211> 461 <212> DNA <213> Homo sapi	en				
<400> 98 agtgacttgt cctccaacaa tgctagttcc tgtcatctat tcaactccag ctggattatt agtgattcag tttcctctac tgaagccact ctgaacacgc ttacctggag aaaagaggct ttaagaaaaa ctaccacatg tttggaataa tcttgacgct	tcgctactaa ttggagcctg ggatgagaga tggttatcta ttggctgggg ttgtgtatcc	atgcagactg caaatctatt ctggctcaag gatgagaaca accatcccat tggtgccggc	gaggggacca cctacttgta aatatcctca gagaaataaa tgaaccttct cgtttatgaa	aaaaggggca cggactttga tgcagcttta gtcagaaaat cttaaggact	60 120 180 240 300 360 420 461
<210> 99 <211> 171 <212> DNA <213> Homo sapi	en				
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<400> 113 Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala 10 Gln Leu Leu Val Asn Leu Leu Thr Phe Gly Leu Glu Val Cys Leu 25 Ala Ala Gly Ile Thr Tyr Val Pro Pro Leu Leu Glu Val Gly Val 40 Glu Glu Lys Phe Met Thr Met Val Leu Gly Ile Gly Pro Val Leu Gly 55 Leu Val Cys Val Pro Leu Leu Gly Ser Ala Ser Asp His Trp Arg Gly 70 Arg Tyr Gly Arg Arg Pro Phe Ile Trp Ala Leu Ser Leu Gly Ile 90 Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala Gly Trp Leu Ala Gly Leu 105 Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu Ala Leu Leu Ile Leu Gly 120 Val Gly Leu Leu Asp Phe Cys Gly Gln Val Cys Phe Thr Pro Leu Glu 135 140 Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro Asp His Cys Arg Gln Ala 150 155 Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu Gly Gly Cys Leu Gly Tyr 165 170 Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser Ala Leu Ala Pro Tyr Leu 185 Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu Leu Thr Leu Ile Phe Leu 200 Thr Cys Val Ala Ala Thr Leu Leu Val Ala Glu Glu Ala Ala Leu Gly 215 Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala Pro Ser Leu Ser Pro His 230 235 Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe Arg Asn Leu Gly Ala Leu 245 250 Leu Pro Arg Leu His Gln Leu Cys Cys Arg Met Pro Arg Thr Leu Arg 265 Arg Leu Phe Val Ala Glu Leu Cys Ser Trp Met Ala Leu Met Thr Phe 280 Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu Gly Leu Tyr Gln Gly Val 295 Pro Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly 310 315 Val Arg Met Gly Ser Leu Gly Leu Phe Leu Gln Cys Ala Ile Ser Leu 325 330 Val Phe Ser Leu Val Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg 340 345 Ala Val Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala 360 Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu 370 375 380 Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr Leu Ala 390 395 Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro Lys Tyr Arg Gly 405 410 Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser Leu Met Thr Ser Phe Leu

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420
                              425
                                                   430
Pro Gly Pro Lys Pro Gly Ala Pro Phe Pro Asn Gly His Val Gly Ala
               440
Gly Gly Ser Gly Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser
                      455
                                          460
Ala Cys Asp Val Ser Val Arg Val Val Gly Glu Pro Thr Glu Ala
       470
                                      475
Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
                                  490
Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met Gly Ser
                               505
Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met Val Ser Ala Ala
                           520
                                              525
Gly Leu Gly Leu Val Ala Ile Tyr Phe Ala Thr Gln Val Val Phe Asp
                      535
Lys Ser Asp Leu Ala Lys Tyr Ser Ala
545
                   550
     <210> 114
     <211> 241
     <212> PRT
     <213> Homo sapien
     <400> 114
Met Gln Cys Phe Ser Phe Ile Lys Thr Met Met Ile Leu Phe Asn Leu
                                   10
Leu Ile Phe Leu Cys Gly Ala Ala Leu Leu Ala Val Gly Ile Trp Val
                               25
           20
Ser Ile Asp Gly Ala Ser Phe Leu Lys Ile Phe Gly Pro Leu Ser Ser
                           40
Ser Ala Met Gln Phe Val Asn Val Gly Tyr Phe Leu Ile Ala Ala Gly
                      55
Val Val Phe Ala Leu Gly Phe Leu Gly Cys Tyr Gly Ala Lys Thr
                   70
Glu Ser Lys Cys Ala Leu Val Thr Phe Phe Phe Ile Leu Leu Ile
               85
                                   90
Phe Ile Ala Glu Val Ala Ala Ala Val Val Ala Leu Val Tyr Thr Thr
           100
                               105
Met Ala Glu His Phe Leu Thr Leu Leu Val Val Pro Ala Ile Lys Lys
       115
                           120
                                              125
Asp Tyr Gly Ser Gln Glu Asp Phe Thr Gln Val Trp Asn Thr Thr Met
                      135
                                          140
Lys Gly Leu Lys Cys Cys Gly Phe Thr Asn Tyr Thr Asp Phe Glu Asp
                  150
                                       155
Ser Pro Tyr Phe Lys Glu Asn Ser Ala Phe Pro Pro Phe Cys Cys Asn
               165
                                   170
                                                      175
Asp Asn Val Thr Asn Thr Ala Asn Glu Thr Cys Thr Lys Gln Lys Ala
                              185
                                                   190
His Asp Gln Lys Val Glu Gly Cys Phe Asn Gln Leu Leu Tyr Asp Ile
                           200
Arg Thr Asn Ala Val Thr Val Gly Gly Val Ala Ala Gly Ile Gly Gly
                       215
                                          220
Leu Glu Leu Ala Ala Met Ile Val Ser Met Tyr Leu Tyr Cys Asn Leu
225
                   230
                                       235
Gln
```

```
<210> 115
      <211> 366
      <212> DNA
     <213> Homo sapien
      <400> 115
gctctttctc tcccctcctc tgaatttaat tctttcaact tgcaatttgc aaggattaca
                                                                      60
120
ttggtttgtg aatccatctt gctttttccc cattggaact agtcattaac ccatctctga
                                                                     180
actggtagaa aaacatctga agagctagtc tatcagcatc tgacaggtga attggatggt
                                                                     240
tctcagaacc atttcaccca gacagcctgt ttctatcctg tttaataaat tagtttgggt
                                                                     300
tetetacatg cataacaaac eetgeteeaa tetgteacat aaaagtetgt gaettgaagt
                                                                     360
ttagtc
                                                                     366
     <210> 116
     <211> 282
     <212> DNA
     <213> Homo sapien
     <220>
     <221> misc feature
     <222> (1)...(282)
     <223> n = A, T, C or G
     <400> 116
acaaagatga accatttcct atattatagc aaaattaaaa tctacccgta ttctaatatt
                                                                      60
gagaaatgag atnaaacaca atnttataaa gtctacttag agaagatcaa gtgacctcaa
                                                                     120
agactttact attttcatat tttaagacac atgatttatc ctattttagt aacctggttc
                                                                     180
atacgttaaa caaaggataa tgtgaacagc agagaggatt tgttgqcaqa aaatctatgt
                                                                     240
tcaatctnga actatctana tcacagacat ttctattcct tt
                                                                     282
     <210> 117
     <211> 305
     <212> DNA
     <213> Homo sapien
     <220>
     <221> misc feature
     <222> (1) ... (305)
     <223> n = A, T, C or G
     <400> 117
acacatgtcg cttcactgcc ttcttagatg cttctggtca acatanagga acagggacca
                                                                     60
tatttatcct ccctcctgaa acaattgcaa aataanacaa aatatatgaa acaattgcaa
                                                                    120
aataaqqcaa aatatatgaa acaacaggtc tcgagatatt ggaaatcagt caatgaagga
                                                                    180
tactgatccc tgatcactgt cctaatgcag gatgtgggaa acagatgagg tcacctctgt
                                                                    240
gactgcccca gcttactgcc tgtagagagt ttctangctg cagttcagac agggagaaat
                                                                    300
tgggt
                                                                    305
     <210> 118
     <211> 71
     <212> DNA
     <213> Homo sapien
     <220>
     <221> misc feature
     <222> (1)...(71)
```

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<223> n = A, T, C or G
      <400> 118
accaaggtgt ntgaatetet gacgtgggga tetetgatte eegcacaate tgagtggaaa
                                                                          60
aantcctggg t
                                                                          71
      <210> 119
      <211> 212
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(212)
      <223> n = A, T, C or G
      <400> 119
actocggttg gtgtcagcag cacgtggcat tgaacatngc aatgtggagc ccaaaccaca
                                                                         60
gaaaatgggg tgaaattggc caactttcta tnaacttatg ttggcaantt tgccaccaac
                                                                        120
agtaagctgg cccttctaat aaaagaaaat tgaaaggttt ctcactaanc ggaattaant
                                                                        180
aatggantca aganactccc aggcctcagc gt
                                                                        212
      <210> 120
      <211> 90
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(90)
      <223> n = A, T, C or G
      <400> 120
actogttgca natcaggggc cccccagagt caccgttgca ggagtccttc tggtcttgcc
                                                                          60
ctccgccggc gcagaacatg ctggggtggt
                                                                          90
      <210> 121
      <211> 218
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (218)
      <223> n = A, T, C or G
      <400> 121
tgtancgtga anacgacaga nagggttgtc aaaaatggag aanccttgaa gtcattttga
                                                                         60
gaataagatt tgctaaaaga tttggggcta aaacatggtt attgggagac atttctgaag
                                                                        120
atatncangt aaattangga atgaattcat ggttcttttg ggaattcctt tacgatngcc
                                                                        180
agcatanact tcatgtgggg atancagcta cccttgta
                                                                        218
      <210> 122
      <211> 171
      <212> DNA
      <213> Homo sapien
```

```
<400> 122
taggggtgta tgcaactgta aggacaaaaa ttgagactca actggcttaa ccaataaagg
                                                                         60
catttgttag ctcatggaac aggaagtcgg atggtggggc atcttcagtg ctgcatgagt
                                                                        120
caccaccccg gcggggtcat ctgtgccaca ggtccctgtt gacagtgcgg t
                                                                        171
      <210> 123
      <211> 76
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (76)
      <223> n = A, T, C or G
      <400> 123
tgtagcgtga agacnacaga atggtgtgtg ctgtgctatc caggaacaca tttattatca
                                                                         60
ttatcaanta ttgtgt
                                                                         76
      <210> 124
      <211> 131
      <212> DNA
      <213> Homo sapien
      <400> 124
acctttcccc aaggccaatg tcctgtgtgc taactggccg gctgcaggac agctgcaatt
                                                                         60
caatgtgctg ggtcatatgg aggggaggag actctaaaat agccaatttt attctcttgg
                                                                        120
ttaagatttg t
                                                                        131
      <210> 125
      <211> 432
      <212> DNA
      <213> Homo sapien
      <400> 125
actttatcta ctggctatga aatagatggt ggaaaattgc gttaccaact ataccactgg
                                                                         60
cttgaaaaag aggtgatagc tcttcagagg acttgtgact tttgctcaga tgctgaaqaa
                                                                        120
ctacagtctg catttggcag aaatgaagat gaatttggat taaatgagga tgctgaagat
                                                                        180
ttgcctcacc aaacaaaagt gaaacaactg agagaaaatt ttcaggaaaa aagacagtgg
                                                                        240
ctcttgaagt atcagtcact tttgagaatg tttcttagtt actgcatact tcatggatcc
                                                                        300
catggtgggg gtcttgcatc tgtaagaatg gaattgattt tgcttttgca agaatctcag
                                                                        360
caggaaacat cagaaccact attttctagc cctctgtcag agcaaacctc agtgcctctc
                                                                        420
ctctttqctt qt
                                                                        432
      <210> 126
      <211> 112
      <212> DNA
      <213> Homo sapien
      <400> 126
acacaacttg aatagtaaaa tagaaactga gctgaaattt ctaattcact ttctaaccat
                                                                         60
agtaagaatg atatttcccc ccagggatca ccaaatattt ataaaaattt qt
                                                                        112
      <210> 127
      <211> 54
      <212> DNA
      <213> Homo sapien
```

```
<400> 127
accacgaaac cacaaacaag atggaagcat caatccactt gccaagcaca gcag
                                                                         54
      <210> 128
      <211> 323
      <212> DNA
      <213> Homo sapien
      <400> 128
acctcattag taattgtttt gttgtttcat ttttttctaa tgtctcccct ctaccagetc
                                                                         60
acctgagata acagaatgaa aatggaagga cagccagatt tctcctttgc tctctgctca
                                                                        120
ttctctctga agtctaggtt acceattttg gggacccatt ataggcaata aacacagttc
                                                                        180
ccaaagcatt tggacagttt cttgttgtgt tttagaatgg ttttcctttt tcttagcctt
                                                                        240
ttectgeaaa aggeteacte agteeettge ttgeteagtg gaetgggete eecagggeet
                                                                        300
aggctgcctt cttttccatg tcc
                                                                        323
      <210> 129
      <211> 192
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(192)
      <223> n = A, T, C or G
      <400> 129
acatacatgt gtgtatattt ttaaatatca cttttgtatc actctgactt tttagcatac
                                                                         60
tgaaaacaca ctaacataat ttntgtgaac catgatcaga tacaacccaa atcattcatc
                                                                        120
tagcacattc atctgtgata naaagatagg tgagtttcat ttccttcacg ttggccaatg
                                                                        180
gataaacaaa qt
                                                                        192
      <210> 130
      <211> 362
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(362)
      <223> n = A, T, C or G
      <400> 130
ccctttttta tggaatgagt agactgtatg tttgaanatt tanccacaac ctctttgaca
                                                                         60
tataatgacg caacaaaaag gtgctgttta gtcctatggt tcagtttatg cccctgacaa
                                                                        120
gtttccattg tgttttgccg atcttctggc taatcgtggt atcctccatg ttattagtaa
                                                                        180
ttctgtattc cattttgtta acgcctggta gatgtaacct gctangaggc taactttata
                                                                        240
cttatttaaa agetettatt ttgtggteat taaaatggea atttatgtge ageaetttat
                                                                        300
tgcagcagga agcacgtgtg ggttggttgt aaagctcttt gctaatctta aaaagtaatg
                                                                       360
                                                                        362
gg
      <210> 131
      <211> 332
      <212> DNA
      <213> Homo sapien
```

```
<220>
      <221> misc feature
      <222> (1)...(332)
      <223> n = A, T, C \text{ or } G
      <400> 131
ctttttgaaa gatcgtgtcc actcctgtgg acatcttgtt ttaatggagt ttcccatgca
                                                                          60
gtangactgg tatggttgca gctgtccaga taaaaacatt tgaagagctc caaaatgaga
                                                                         120
gttctcccag gttcgccctg ctgctccaag tctcagcagc agcctctttt aggaggcatc
                                                                         180
ttctgaacta gattaaggca gcttgtaaat ctgatgtgat ttggtttatt atccaactaa
                                                                         240
cttccatctg ttatcactgg agaaagccca gactccccan gacnggtacg gattgtgggc
                                                                         300
atanaaggat tgggtgaagc tggcgttgtg gt
                                                                         332
      <210> 132
      <211> 322
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(322)
      <223> n = A, T, C \text{ or } G
      <400> 132
acttttgcca ttttgtatat ataaacaatc ttgggacatt ctcctgaaaa ctaggtgtcc
                                                                          60
agtggctaag agaactcgat ttcaagcaat tctgaaagga aaaccagcat gacacagaat
                                                                         120
ctcaaattcc caaacagggg ctctgtggga aaaatgaggg aggacctttg tatctcgggt
                                                                         180
tttagcaagt taaaatgaan atgacaggaa aggcttattt atcaacaaag agaagagttg
                                                                         240
ggatgcttct aaaaaaaact ttggtagaga aaataggaat gctnaatcct agggaagcct
                                                                         300
gtaacaatct acaattggtc ca
                                                                         322
      <210> 133
      <211> 278
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (278)
      <223> n = A, T, C or G
      <400> 133
acaagcette acaagtttaa etaaattggg attaatettt etgtanttat etgeataatt
                                                                          60
cttgtttttc tttccatctg gctcctgggt tgacaatttg tggaaacaac tctattgcta
                                                                         120
ctatttaaaa aaaatcacaa atctttccct ttaagctatg ttnaattcaa actattcctg
                                                                         180
ctattcctgt tttgtcaaag aaattatatt tttcaaaata tgtntatttg tttgatgggt
                                                                         240
cccacgaaac actaataaaa accacagaga ccagcctg
                                                                         278
      <210> 134
      <211> 121
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(121)
      <223> n = A, T, C or G
```

```
<400> 134
gtttanaaaa cttgtttagc tccatagagg aaagaatgtt aaactttgta ttttaaaaca
                                                                         60
tgattctctg aggttaaact tggttttcaa atgttatttt tacttgtatt ttgcttttgg
                                                                        120
                                                                        121
      <210> 135
      <211> 350
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(350)
      <223> n = A, T, C or G
      <400> 135
acttanaacc atgcctagca catcagaatc cctcaaagaa catcagtata atcctatacc
                                                                         60
atancaagtg gtgactggtt aagcgtgcga caaaggtcag ctggcacatt acttgtgtgc
                                                                        120
aaacttgata cttttgttct aagtaggaac tagtatacag tncctaggan tggtactcca
                                                                        180
gggtgccccc caactcctgc agccgctcct ctgtgccagn ccctgnaagg aactttcgct
                                                                        240
ccacctcaat caagccctgg gccatgctac ctgcaattgg ctgaacaaac gtttgctgag
                                                                        300
ttcccaagga tgcaaagcct ggtgctcaac tcctggggcg tcaactcagt
                                                                        350
      <210> 136
      <211> 399
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(399)
      <223> n = A, T, C or G
      <400> 136
tgtaccgtga agacgacaga agttgcatgg cagggacagg gcagggccga ggccagggtt
                                                                         60
gctgtgattg tatccgaata ntcctcgtga gaaaagataa tgagatgacg tgagcagcct
                                                                        120
gcagacttgt gtctgccttc aanaagccag acaggaaggc cctgcctgcc ttggctctga
                                                                        180
cctggcggcc agccagccag ccacaggtgg gcttcttcct tttgtggtga caacnccaag
                                                                        240
aaaactgcag aggcccaggg tcaggtgtna gtgggtangt gaccataaaa caccaggtgc
                                                                        300
teccaggaac eegggeaaag gecateeeca eetacageea geatgeeeac tggegtgatg
                                                                        360
ggtgcagang gatgaagcag ccagntgttc tgctgtggt
                                                                        399
      <210> 137
      <211> 165
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(165)
      <223> n = A, T, C or G
      <400> 137
actggtgtgg tngggggtga tgctggtggt anaagttgan gtgacttcan gatggtgtgt
                                                                         60
ggaggaagtg tgtgaacgta gggatgtaga ngttttggcc gtgctaaatg agcttcggga
                                                                        120
ttggctggtc ccactggtgg tcactgtcat tggtggggtt cctgt
                                                                        165
```

```
<210> 138
      <211> 338
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(338)
      <223> n = A, T, C or G
      <400> 138
actcactgga atgccacatt cacaacagaa tcagaggtct gtgaaaacat taatggctcc
                                                                         60
ttaacttctc cagtaagaat cagggacttg aaatggaaac gttaacagcc acatgcccaa
                                                                        120
tgctgggcag tctcccatgc cttccacagt gaaagggctt gagaaaaatc acatccaatg
                                                                        180
tcatgtgttt ccagccacac caaaaggtgc ttggggtgga gggctggggg catananggt
                                                                        240
cangeeteag gaageeteaa gtteeattea getttgeeae tgtacattee ceatntttaa
                                                                        300
aaaaactgat gcctttttt tttttttttt taaaattc
                                                                        338
      <210> 139
      <211> 382
      <212> DNA
      <213> Homo sapien
      <400> 139
gggaatcttg gtttttggca tctggtttgc ctatagccga ggccactttg acagaacaaa
                                                                         60
gaaagggact tcgagtaaga aggtgattta cagccagcct agtgcccgaa gtgaaggaga
                                                                        120
atteaaacag acctegteat teetggtgtg ageetggteg geteacegee tateatetge
                                                                        180
atttgcctta ctcaggtgct accggactct ggcccctgat gtctgtagtt tcacaggatg
                                                                        240
cettatttgt cttctacacc ccacagggcc ccctacttct tcggatgtgt ttttaataat
                                                                        300
gtcagctatg tgccccatcc tecttcatgc cetecetece tttectacca etgetgagtg
                                                                        360
gcctggaact tgtttaaagt gt
                                                                        382
      <210> 140
      <211> 200
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1) ... (200)
      <223> n = A, T, C or G
      <400> 140
accaaanctt ctttctgttg tgttngattt tactataggg gtttngcttn ttctaaanat
                                                                         60
actittcatt taacanctit tgttaagtgt caggctgcac tttgctccat anaattattg
                                                                        120
ttttcacatt tcaacttgta tgtgtttgtc tcttanagca ttggtgaaat cacatatttt
                                                                        180
atattcagca taaaggagaa
                                                                        200
      <210> 141
      <211> 335
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (335)
```

```
<223> n = A, T, C \text{ or } G
      <400> 141
actttatttt caaaacactc atatgttgca aaaaacacat agaaaaataa agtttggtgg
                                                                         60
qqqtqctgac taaacttcaa qtcacagact tttatgtgac agattggagc agggtttgtt
                                                                        120
atgcatgtag agaacccaaa ctaatttatt aaacaggata gaaacaggct gtctgggtga
                                                                        180
aatqqttctq aqaaccatcc aattcacctg tcagatgctg atanactagc tcttcagatg
                                                                        240
tttttctacc agttcagaga tnggttaatg actanttcca atggggaaaa agcaagatgg
                                                                        300
attcacaaac caagtaattt taaacaaaga cactt
                                                                        335
      <210> 142
      <211> 459
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(459)
      <223> n = A, T, C or G
      <400> 142
accaggttaa tattgccaca tatatccttt ccaattgcgg gctaaacaga cgtgtattta
                                                                         60
gggttgttta aagacaaccc agcttaatat caagagaaat tgtgaccttt catggagtat
                                                                        120
ctgatggaga aaacactgag ttttgacaaa tcttatttta ttcagatagc agtctgatca
                                                                        180
cacatggtcc aacaacactc aaataataaa tcaaatatna tcagatgtta aagattggtc
                                                                        240
ttcaaacatc atagccaatg atgccccgct tgcctataat ctctccgaca taaaaccaca
                                                                        300
tcaacacctc agtggccacc aaaccattca gcacagcttc cttaactgtg agctgtttga
                                                                        360
agctaccagt ctgagcacta ttgactatnt ttttcangct ctgaatagct ctagggatct
                                                                        420
cagcangggt gggaggaacc agctcaacct tggcgtant
                                                                        459
      <210> 143
      <211> 140
      <212> DNA
      <213> Homo sapien
      <400> 143
acatttcctt ccaccaagtc aggactcctg gcttctgtgg gagttcttat cacctgaggg
                                                                         60
aaatccaaac agtctctcct agaaaggaat agtgtcacca accccaccca tctccctgag
                                                                        120
accatccgac ttccctgtgt
                                                                        140
      <210> 144
      <211> 164
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(164)
      <223> n = A, T, C or G
      <400> 144
acttcagtaa caacatacaa taacaacatt aagtgtatat tgccatcttt gtcatttct
                                                                         60
atctatacca ctctcccttc tgaaaacaan aatcactanc caatcactta tacaaatttg
                                                                        120
aggcaattaa tccatatttg ttttcaataa ggaaaaaaag atgt
                                                                        164
      <210> 145
      <211> 303
```

```
<212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(303)
      <223> n = A, T, C or G
      <400> 145
acgtagacca tccaactttg tatttgtaat ggcaaacatc cagnagcaat tcctaaacaa
                                                                         60
actggagggt atttataccc aattatccca ttcattaaca tgccctcctc ctcaggctat
                                                                        120
gcaggacagc tatcataagt cggcccaggc atccagatac taccatttgt ataaacttca
                                                                        180
gtaggggagt ccatccaagt gacaggtcta atcaaaggag gaaatggaac ataagcccag
                                                                        240
tagtaaaatn ttgcttagct gaaacagcca caaaagactt accgccgtgg tgattaccat
                                                                        300
caa
                                                                        303
      <210> 146
      <211> 327
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (327)
      <223> n = A, T, C or G
      <400> 146
actgcagete aattagaagt ggtetetgae ttteateane ttetecetgg getecatgae
                                                                         60
actggcctgg agtgactcat tgctctggtt ggttgagaga gctcctttgc caacagqcct
                                                                        120
ccaagtcagg gctgggattt gtttcctttc cacattctag caacaatatg ctggccactt
                                                                        180
cctgaacagg gagggtggga ggagccagca tggaacaagc tgccactttc taaaqtaqcc
                                                                        240
agacttgccc ctgggcctgt cacacctact gatgaccttc tgtgcctgca ggatggaatg
                                                                        300
taggggtgag ctgtgtgact ctatggt
                                                                        327
      <210> 147
      <211> 173
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (173)
      <223> n = A, T, C or G
      <400> 147
acattgtttt tttgagataa agcattgana gagctctcct taacgtgaca caatggaagg
                                                                         60
actggaacac atacccacat ctttgttctg agggataatt ttctgataaa gtcttgctgt
                                                                        120
atattcaagc acatatgtta tatattattc agttccatgt ttatagccta gtt
                                                                        173
      <210> 148
      <211> 477
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (477)
```

## <223> n = A, T, C or G<400> 148 acaaccactt tatctcatcg aatttttaac ccaaactcac tcactgtgcc tttctatcct 60 atgggatata ttatttqatq ctccatttca tcacacatat atqaataata cactcatact 120 qccctactac ctgctgcaat aatcacattc ccttcctgtc ctgaccctga agccattggg 180 gtggtcctag tggccatcag tccangcctg caccttgagc ccttgagctc cattgctcac 240 nccancecae cteacegace ceatectett acaeagetae eteettgete tetaacecea 300 tagattatnt ccaaattcag tcaattaagt tactattaac actctacccg acatgtccag 360 caccactggt aagcettete cagecaacae acacacaca acacneacae acacacatat 420 ccaggcacag gctacctcat cttcacaatc accectttaa ttaccatgct atggtgg 477 <210> 149 <211> 207 <212> DNA <213> Homo sapien <400> 149 acagttgtat tataatatca agaaataaac ttgcaatgag agcatttaag agggaagaac 60 taacgtattt tagagagcca aggaaggttt ctgtggggag tgggatgtaa ggtggggcct 120 gatgataaat aagagtcagc caggtaagtg ggtggtgtgg tatgggcaca gtgaagaaca 180 tttcaggcag agggaacagc agtgaaa 207 <210> 150 <211> 111 <212> DNA <213> Homo sapien <220> <221> misc feature <222> (1)...(111) <223> n = A, T, C or G<400> 150 accttgattt cattgctgct ctgatggaaa cccaactatc taatttagct aaaacatggg 60 cacttaaatg tggtcagtgt ttggacttgt taactantgg catctttggg t 111 <210> 151 <211> 196 <212> DNA <213> Homo sapien <400> 151 agcgcggcag gtcatattga acattccaga tacctatcat tactcgatgc tgttgataac 60 agcaagatgg ctttgaactc agggtcacca ccagctattg gaccttacta tgaaaaccat 120 ggataccaac cggaaaaccc ctatcccgca cagcccactg tggtccccac tgtctacgag 180 gtgcatccgg ctcagt 196 <210> 152 <211> 132 <212> DNA <213> Homo sapien <400> 152 acagcacttt cacatgtaag aagggagaaa ttcctaaatg taggagaaag ataacagaac 60 cttccccttt tcatctagtg gtggaaacct gatgctttat gttgacagga atagaaccag 120 gagggagttt gt 132

```
<210> 153
      <211> 285
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(285)
      <223> n = A, T, C or G
      <400> 153
acaanaccca nganaggcca ctggccgtgg tgtcatggcc tccaaacatg aaagtgtcag
                                                                         60
cttctgctct tatgtcctca tctgacaact ctttaccatt tttatcctcg ctcagcagga
                                                                        120
gcacatcaat aaagtccaaa gtcttggact tggccttggc ttggaggaag tcatcaacac
                                                                        180
cctggctagt gagggtgcgg cgccgctcct ggatgacggc atctgtgaag tcgtgcacca
                                                                        240
gtctgcaggc cctgtggaag cgccgtccac acggagtnag gaatt
                                                                        285
      <210> 154
      <211> 333
      <212> DNA
      <213> Homo sapien
      <400> 154
accacagtcc tgttgggcca gggcttcatg accctttctg tgaaaagcca tattatcacc
                                                                         60
accccaaatt tttccttaaa tatctttaac tgaaggggtc agcctcttga ctgcaaagac
                                                                        120
cctaagccgg ttacacagct aactcccact ggccctgatt tgtgaaattg ctgctgcctg
                                                                        180
attggcacag gagtcgaagg tgttcagctc ccctcctccg tggaacgaga ctctgatttg
                                                                        240
agtttcacaa attctcgggc cacctcgtca ttgctcctct gaaataaaat ccggagaatg
                                                                        300
gtcaggcctg tctcatccat atggatcttc cqq
                                                                        333
      <210> 155
      <211> 308
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(308)
      <223> n = A, T, C or G
      <400> 155
actggaaata ataaaaccca catcacagtg ttgtgtcaaa gatcatcagg gcatggatgg
                                                                         60
gaaagtgctt tgggaactgt aaagtgccta acacatgatc gatgattttt gttataatat
                                                                        120
ttgaatcacg gtgcatacaa actctcctgc ctgctcctcc tgggccccag ccccagcccc
                                                                        180
atcacagete actgetetgt teatecagge ceageatgta gtggetgatt ettettgget
                                                                        240
gcttttagcc tccanaagtt tctctgaagc caaccaaacc tctangtgta aggcatgctg
                                                                        300
gccctggt
                                                                        308
      <210> 156
      <211> 295
      <212> DNA
      <213> Homo sapien
      <400> 156
accttgctcg gtgcttggaa catattagga actcaaaata tgagatgata acagtgccta
                                                                         60
ttattgatta ctgagagaac tgttagacat ttagttgaag attttctaca caggaactga
                                                                        120
```

<211> 380

```
gaataggaga ttatgtttgg ccctcatatt ctctcctatc ctccttgcct cattctatgt
                                                                        180
ctaatatatt ctcaatcaaa taaggttagc ataatcagga aatcgaccaa ataccaatat
                                                                        240
aaaaccagat gtctatcctt aagattttca aatagaaaac aaattaacag actat
                                                                        295
      <210> 157
      <211> 126
      <212> DNA
      <213> Homo sapien
      <400> 157
acaagtttaa atagtgctgt cactgtgcat gtgctgaaat gtgaaatcca ccacatttct
                                                                         60
gaagagcaaa acaaattetg teatgtaate tetatettgg gtegtgggta tatetgteee
                                                                        120
cttagt
                                                                        126
      <210> 158
      <211> 442
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(442)
      <223> n = A, T, C or G
      <400> 158
acccactggt cttggaaaca cccatcctta atacgatgat ttttctgtcg tgtgaaaatg
                                                                         60
aanccagcag gctgccccta gtcagtcctt ccttccagag aaaaagagat ttgagaaagt
                                                                        120
gcctgggtaa ttcaccatta atttcctccc ccaaactctc tgagtcttcc cttaatattt
                                                                        180
ctggtggttc tgaccaaagc aggtcatggt ttgttgagca tttgggatcc cagtgaagta
                                                                        240
natgtttgta gccttgcata cttagccctt cccacgcaca aacqqaqtqq caqaqtqqtq
                                                                        300
ccaaccctgt tttcccagtc cacgtagaca gattcacagt gcggaattct ggaagctgga
                                                                        360
nacagacggg ctctttgcag agccgggact ctgagangga catgagggcc tctgcctctg
                                                                        420
tgttcattct ctgatgtcct gt
                                                                        442
      <210> 159
      <211> 498
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(498)
      <223> n = A, T, C or G
      <400> 159
acttccaggt aacgttgttg tttccgttga gcctgaactg atgggtgacg ttgtaggttc
                                                                         60
tccaacaaga actgaggttg cagagcgggt agggaagagt gctgttccag ttgcacctgg
                                                                        120
gctgctgtgg actgttgttg attcctcact acggcccaag gttgtggaac tggcanaaag
                                                                        180
gtgtgttgtt gganttgagc tcgggcggct gtggtaggtt gtgggctctt caacaggggc
                                                                        240
tgctgtggtg ccgggangtg aangtgttgt gtcacttgag cttggccagc tctggaaagt
                                                                        300
antanattet teetgaagge eagegettgt ggagetggea ngggteantg ttgtgtgtaa
                                                                        360
cgaaccagtg ctgctgtggg tgggtgtana tcctccacaa agcctgaagt tatggtgtcn
                                                                        420
tcaggtaana atgtggtttc agtgtccctg ggcngctgtg gaaggttgta nattgtcacc
                                                                        480
aagggaataa gctgtggt
                                                                        498
      <210> 160
```

```
<212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (380)
      \langle 223 \rangle n = A,T,C or G
      <400> 160
acctgcatcc agcttccctg ccaaactcac aaggagacat caacctctag acagggaaac
                                                                          60
agcttcagga tacttccagg agacagagcc accagcagca aaacaaatat tcccatgcct
                                                                         120
ggagcatggc atagaggaag ctganaaatg tggggtctga ggaagccatt tgagtctqqc
                                                                         180
cactagacat ctcatcagcc acttgtgtga agagatgccc catgacccca gatgcctctc
                                                                         240
ccacccttac ctccatctca cacacttgag ctttccactc tgtataattc taacatcctg
                                                                         300
gagaaaaatg gcagtttgac cgaacctgtt cacaacggta gaggctgatt tctaacgaaa
                                                                         360
cttgtagaat gaagcctgga
                                                                         380
      <210> 161
      <211> 114
      <212> DNA
      <213> Homo sapien
      <400> 161
actocacato coctotgago aggoggttgt cgttcaaggt gtatttggcc ttgcctgtca
                                                                          60
cactgtccac tggcccctta tccacttggt gcttaatccc tcgaaagagc atgt
                                                                         114
      <210> 162
      <211> 177
      <212> DNA
      <213> Homo sapien
      <400> 162
actttctgaa tcgaatcaaa tgatacttag tgtagtttta atatcctcat atatatcaaa
                                                                          60
gttttactac tctgataatt ttgtaaacca ggtaaccaga acatccagtc atacagcttt
                                                                         120
tggtgatata taacttggca ataacccagt ctggtgatac ataaaactac tcactgt
                                                                         177
      <210> 163
      <211> 137
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (137)
      <223> n = A, T, C or G
      <400> 163
catttataca gacaggcgtg aagacattca cgacaaaaac gcgaaattct atcccgtgac
                                                                          60
canagaagge agctacggct actcctacat cctggcgtgg gtggccttcg cctgcacctt
                                                                         120
catcagcggc atgatgt
                                                                         137
      <210> 164
      <211> 469
      <212> DNA
      <213> Homo sapien
      <220>
```

```
<221> misc feature
      <222> (1)...(469)
      <223> n = A, T, C or G
      <400> 164
cttatcacaa tgaatgttct cctgggcagc gttgtgatct ttqccacctt cqtqacttta
                                                                         60
tgcaatgcat catgctattt catacctaat gagggagttc caggagattc aaccaggaaa
                                                                        120
tgcatggatc tcaaaggaaa caaacaccca ataaactcqq aqtqqcaqac tqacaactqt
                                                                        180
gagacatgca cttgctacga aacagaaatt tcatqttqca cccttqtttc tacacctqtq
                                                                        240
ggttatgaca aagacaactg ccaaagaatc ttcaagaagg aggactgcaa gtatatcgtg
                                                                        300
gtggagaaga aggacccaaa aaagacctgt tctgtcagtg aatggataat ctaatgtgct
                                                                        360
tctagtaggc acagggctcc caggccaggc ctcattctcc tctggcctct aatagtcaat
                                                                        420
gattgtgtag ccatgcctat cagtaaaaag atntttgagc aaacacttt
                                                                        469
      <210> 165
      <211> 195
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(195)
      <223> n = A, T, C or G
      <400> 165
acagtttttt atanatatcg acattgccgg cacttgtgtt cagtttcata aagctggtgg
                                                                         60
atccgctgtc atccactatt ccttggctag agtaaaaatt attcttatag cccatgtccc
                                                                        120
tgcaggccgc ccgcccgtag ttctcgttcc agtcgtcttg gcacacaggg tgccaggact
                                                                        180
tcctctgaga tgagt
                                                                        195
      <210> 166
      <211> 383
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(383)
      <223> n = A, T, C or G
      <400> 166
acatcttagt agtgtggcac atcaggggc catcagggtc acagtcactc atagcctcgc
                                                                         60
cgaggtcgga gtccacacca ccggtgtagg tgtgctcaat cttgggcttg gcgcccacct
                                                                        120
ttggagaagg gatatgctgc acacacatgt ccacaaagcc tgtgaactcg ccaaagaatt
                                                                        180
tttgcagacc agcctgagca aggggcggat gttcagcttc agctcctcct tcgtcaggtg
                                                                        240
gatgccaacc tcgtctangg tccgtgggaa gctggtgtcc acntcaccta caacctgggc
                                                                        300
gangatetta taaagagget eenagataaa etecaegaaa ettetetggg agetgetagt
                                                                        360
nggggccttt ttggtgaact ttc
                                                                        383
      <210> 167
      <211> 247
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (247)
```

```
<223> n = A, T, C or G
      <400> 167
acagagccag accttggcca taaatgaanc agagattaag actaaacccc aagtcganat
                                                                         60
tggagcagaa actggagcaa gaagtgggcc tggggctgaa gtagagacca aqgccactgc
                                                                        120
tatanccata cacagageca acteteagge caaggenatg gttggggeag anceagagae
                                                                        180
tcaatctgan tccaaagtgg tggctggaac actggtcatg acanaggcag tgactctgac
                                                                        240
tgangtc
                                                                        247
      <210> 168
      <211> 273
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(273)
      <223> n = A, T, C or G
      <400> 168
acttctaagt tttctagaag tggaaggatt gtantcatcc tgaaaatggg tttacttcaa
                                                                         60
aatccctcan ccttgttctt cacnactgtc tatactgana gtgtcatgtt tccacaaagg
                                                                        120
gctgacacct gagcctgnat tttcactcat ccctgagaag ccctttccag tagggtgggc
                                                                        180
aattcccaac ttccttgcca caagcttccc aggctttctc ccctggaaaa ctccagcttg
                                                                        240
agtcccagat acactcatgq gctgccctgq gca
                                                                        273
      <210> 169
      <211> 431
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(431)
      <223> n = A, T, C or G
      <400> 169
acagccttgg cttccccaaa ctccacagtc tcagtgcaga aagatcatct tccagcagtc
                                                                         60
agetcaqace agggtcaaag gatgtgacat caacagttte tggtttcaga acaggtteta
                                                                        120
ctactgtcaa atgacccccc atacttcctc aaaggctgtg gtaagttttg cacaggtgag
                                                                        180
ggcagcagaa agggggtant tactgatgga caccatcttc tctgtatact ccacactgac
                                                                        240
cttgccatgg gcaaaggccc ctaccacaaa aacaatagga tcactgctgg gcaccagctc
                                                                        300
acgcacatca ctgacaaccg ggatggaaaa agaantgcca actttcatac atccaactgg
                                                                        360
aaagtgatct gatactggat tottaattac cttcaaaagc ttctgggggc catcagctgc
                                                                        420
tcgaacactg a
                                                                        431
      <210> 170
      <211> 266
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(266)
      <223> n = A, T, C or G
      <400> 170
```

```
acctgtgggc tgggctgtta tgcctgtqcc qqctqctqaa aqqqaqttca qaqqtqqaqc
                                                                       60
tcaaggaget ctgcaggcat tttqccaanc ctctccanaq canaqqqaqc aacctacact
                                                                      120
ccccgctaga aagacaccag attggagtcc tgggaggggg agttggggtg ggcatttgat
                                                                      180
gtatacttgt cacctgaatg aangagccag agaggaanga gacgaanatg anattggcct
                                                                      240
tcaaaqctaq qqqtctqqca qqtqqa
                                                                      266
      <210> 171
      <211> 1248
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(1248)
      <223> n = A, T, C \text{ or } G
      <400> 171
ggcagccaaa tcataaacgg cgaggactgc agcccgcact cgcagccctg gcaggcggca
                                                                       60
ctggtcatgg aaaacgaatt gttctgctcg ggcgtcctgg tgcatccgca gtqqqtqctq
                                                                      120
tcagccgcac actgtttcca gaagtgagtg cagagctcct acaccatcgg gctqqqcctq
                                                                      180
cacagtettg aggeegacca agageeaggg ageeagatgg tggaggeeag ceteteegta
                                                                      240
cggcacccag agtacaacag accettgete getaacgace teatgeteat caagttggae
                                                                      300
gaatccgtgt ccgagtctga caccatccgg agcatcagca ttgcttcgca gtgccctacc
                                                                      360
gcggggaact cttgcctcgt ttctggctgg ggtctgctgg cgaacggcag aatgcctacc
                                                                      420
gtgctgcagt gcgtgaacgt gtcggtggtg tctgaggagg tctgcagtaa gctctatqac
                                                                      480
cegetgtace acceeageat gttetgegee ggeggaggge aagaceagaa ggaeteetge
                                                                      540
aacggtgact ctggggggcc cctgatctgc aacgggtact tgcagggcct tgtgtctttc
                                                                      600
ggaaaagccc cgtgtggcca agttggcgtg ccaggtgtct acaccaacct ctgcaaattc
                                                                      660
actgagtgga tagagaaaac cgtccaggcc agttaactct ggggactggg aacccatgaa
                                                                      720
attgaccccc aaatacatcc tgcggaagga attcaggaat atctgttccc agcccctcct
                                                                      780
ccctcaggcc caggagtcca ggccccagc ccctcctccc tcaaaccaag ggtacagatc
                                                                      840
cccagcccct cctccctcag acccaggagt ccagacccc cagccctcc tccctcagac
                                                                      900
ccaggagtcc agccctcct ccctcagacc caggagtcca qacccccag ccctcctcc
                                                                      960
ctcagaccca ggggtccagg ccccaaccc ctcctccctc agactcagag qtccaaqccc
                                                                     1020
ccaaccente attecccaga cccagaggte caggteccag ccctentee etcagaccea
                                                                     1080
geggtecaat gecaectaga etntecetgt acacagtgee eeettgtgge acgttgaece
                                                                     1140
aaccttacca gttggttttt catttttngt ccctttcccc tagatccaga aataaagttt
                                                                     1200
1248
      <210> 172
      <211> 159
      <212> PRT
      <213> Homo sapien
      <220>
      <221> VARIANT
      <222> (1)...(159)
      <223> Xaa = Any Amino Acid
      <400> 172
Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro
                                    10
Leu Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser
                                25
                                                    30
Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr
Ala Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly
```

```
Arg Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu
                    70
                                         75
Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe
                85
                                     90
Cys Ala Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser
            100
                                105
                                                     110
Gly Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe
                            120
                                                 125
Gly Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn
                        135
                                             140
    130
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
145
                    150
      <210> 173
      <211> 1265
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(1265)
      <223> n = A, T, C or G
      <400> 173
ggcagcccgc actcgcagcc ctggcaggcg gcactggtca tggaaaacga attgttctgc
                                                                        60
tegggegtee tggtgeatee geagtgggtg etgteageeg eacactgttt eeagaactee
                                                                       120
tacaccatcg ggctgggcct gcacagtctt gaggccgacc aagagccagg gagccagatg
                                                                       180
gtggaggcca gcctctccgt acggcaccca gagtacaaca gacccttgct cgctaacgac
                                                                       240
ctcatgctca tcaagttgga cgaatccgtg tccgagtctg acaccatccg gagcatcagc
                                                                       300
attgcttcgc agtgccctac cgcggggaac tcttgcctcg tttctggctg gggtctqctq
                                                                       360
gcgaacggtg agctcacggg tgtgtgtctg ccctcttcaa ggaggtcctc tgcccagtcg
                                                                       420
cgggggctga cccagagete tgcgteccag gcagaatgee taccgtgctg cagtgcgtga
                                                                       480
acgtgtcggt ggtgtctgag gaggtctgca gtaagctcta tgacccgctg taccacccca
                                                                       540
gcatgttctg cgccggcgga gggcaagacc agaaggactc ctgcaacggt gactctqggq
                                                                       600
ggcccctgat ctgcaacggg tacttgcagg gccttgtgtc tttcggaaaa gccccgtgtg
                                                                       660
gccaagttgg cgtgccaggt gtctacacca acctctgcaa attcactgag tggatagaga
                                                                       720
aaaccgtcca ggccagttaa ctctggggac tgggaaccca tgaaattgac ccccaaatac
                                                                       780
atcctgcgga aggaattcag gaatatctgt tcccagcccc tcctccctca ggcccaggag
                                                                       840
tocaggocco cagoccotco tocotcaaac caagggtaca gatocccago coctoctoco
                                                                       900
teagacceag gagtecagae eccecageee etecteete agacceagga gtecageece
                                                                       960
tecteentea gaeceaggag tecagacece ecagececte eteceteaga eccaggggtt
                                                                      1020
gaggccccca acccctcctc cttcagagtc agaggtccaa gcccccaacc cctcgttccc
                                                                      1080
cagacccaga ggtnnaggtc ccagcccctc ttccntcaga cccagnggtc caatgccacc
                                                                      1140
tagattttcc ctgnacacag tgcccccttg tggnangttg acccaacctt accagttqqt
                                                                      1200
ttttcatttt tngtcccttt cccctagatc cagaaataaa gtttaagaga ngngcaaaaa
                                                                      1260
aaaaa
                                                                      1265
      <210> 174
      <211> 1459
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(1459)
```

<223> n = A, T, C or G

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<400> 174
                                                                        60
ggtcagccgc acactgtttc cagaagtgag tgcagagctc ctacaccatc gggctgggcc
                                                                       120
tgcacaqtct tgaggccgac caagagccag ggagccagat ggtggaggcc agcctctccg
tacggcaccc agagtacaac agacccttgc tcgctaacga cctcatgctc atcaagttgg
                                                                       180
acgaatccgt gtccgagtct gacaccatcc ggagcatcag cattgcttcg cagtgcccta
                                                                       240
ccgcggggaa ctcttgcctc gtttctggct ggggtctgct ggcgaacggt gagctcacgg
                                                                       300
                                                                       360
qtqtqtqtct gccctcttca aggaggtcct ctgcccagtc gcgggggctg acccagagct
                                                                       420
ctgcgtccca ggcagaatgc ctaccgtgct gcagtgcgtg aacgtgtcgg tggtgtctga
                                                                       480
ngaggtctgc antaagctct atgacccgct gtaccacccc ancatgttct gcgccggcgg
                                                                       540
agggcaagac cagaaggact cctgcaacgt gagagagggg aaaggggagg gcaggcgact
cagggaaggg tggagaaggg ggagacagag acacacaggg ccgcatggcg agatgcagag
                                                                       600
atggagagac acacagggag acagtgacaa ctagagagag aaactgagag aaacagagaa
                                                                       660
                                                                       720
ataaacacag gaataaagag aagcaaagga agagagaaac agaaacagac atggggaggc
                                                                       780
aqaaacacac acacatagaa atgcagttga ccttccaaca gcatggggcc tgagggcggt
                                                                       840
qacctccacc caatagaaaa tcctcttata acttttgact ccccaaaaaac ctgactagaa
atagcctact gttgacgggg agccttacca ataacataaa tagtcgattt atgcatacgt
                                                                       900
tttatgcatt catgatatac ctttgttgga attttttgat atttctaagc tacacagttc
                                                                       960
qtctgtgaat ttttttaaat tgttgcaact ctcctaaaat ttttctgatg tgtttattga
                                                                      1020
                                                                      1080
aaaaatccaa gtataagtgg acttgtgcat tcaaaccagg gttgttcaag ggtcaactgt
                                                                      1140
qtacccagaq ggaaacagtg acacagattc atagaggtga aacacgaaga gaaacaggaa
aaatcaagac tctacaaaga ggctgggcag ggtggctcat gcctgtaatc ccagcacttt
                                                                      1200
                                                                      1260
qqqaqqcqaq qcaqqcaqat cacttgaggt aaggagttca agaccagcct ggccaaaatg
                                                                      1320
gtgaaatcct gtctgtacta aaaatacaaa agttagctgg atatggtggc aggcgcctgt
                                                                      1380
aatcccagct acttgggagg ctgaggcagg agaattgctt gaatatggga ggcagaggtt
                                                                      1440
gaagtgagtt gagatcacac cactatactc cagctggggc aacagagtaa gactctgtct
                                                                      1459
caaaaaaaaa aaaaaaaaa
      <210> 175
      <211> 1167
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1) ... (1167)
      <223> n = A, T, C or G
      <400> 175
gcgcagccct ggcaggcggc actggtcatg gaaaacgaat tgttctgctc gggcgtcctg
                                                                        60
gtgcatccgc agtgggtgct gtcagccgca cactgtttcc agaactccta caccatcggg
                                                                       120
                                                                       180
ctgggcctgc acagtcttga ggccgaccaa gagccaggga gccagatggt ggaggccagc
                                                                       240
ctctccgtac ggcacccaga gtacaacaga ctcttgctcg ctaacgacct catgctcatc
aagttggacg aatccgtgtc cgagtctgac accatccgga gcatcagcat tgcttcgcag
                                                                       300
tgccctaccg cggggaactc ttgcctcgtn tctggctggg gtctgctggc gaacggcaga
                                                                       360
atgcctaccg tgctgcactg cgtgaacgtg tcggtggtgt ctgaggangt ctgcagtaag
                                                                       420
ctctatgacc cgctgtacca ccccagcatg ttctgcgccg gcggagggca agaccagaag
                                                                       480
gactoctgca acggtgacto tggggggccc ctgatctgca acgggtactt gcagggcctt
                                                                       540
                                                                        600
gtgtctttcg gaaaagcccc gtgtggccaa cttggcgtgc caggtgtcta caccaacctc
tgcaaattca ctgagtggat agagaaaacc gtccagncca gttaactctg gggactggga
                                                                       660
acccatgaaa ttgaccccca aatacatcct gcggaangaa ttcaggaata tctgttccca
                                                                       720
                                                                       780
geocetecte ceteaggeee aggagteeag geocecagee cetecteest caaaccaagg
                                                                       840
gtacagatec ceageceete eteceteaga eccaggagte cagacecece ageceetent
                                                                       900
centeagace caggagteca geceetecte enteagacge aggagtecag acceeceage
```

cententeeg teagaceeag gggtgeagge ceceaacee tenteentea gagteagagg

tecaageece caaceeteg ttececagae ceagaggtne aggteecage eceteeteec

teagacecag eggteeaatg ceacetagan thteeetgta cacagtgeee cettgtggea

960

1020

```
ngttgaccca accttaccag ttggtttttc attttttgtc cctttcccct agatccagaa
                                                                       1140
ataaagtnta agagaagcgc aaaaaaa
                                                                       1167
      <210> 176
      <211> 205
      <212> PRT
      <213> Homo sapien
      <220>
      <221> VARIANT
      <222> (1)...(205)
      <223> Xaa = Any Amino Acid
      <400> 176
Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp
                                    10
Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu
                                 25
Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val
                            40
Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Leu Leu Leu
                        55
Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser
                    70
                                         75
Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly
                                     90
                85
Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg Met
            100
                                105
                                                     110
Pro Thr Val Leu His Cys Val Asn Val Ser Val Val Ser Glu Xaa Val
                            120
                                                 125
Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys Ala
    130
                        135
                                             140
Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly
                    150
                                         155
                                                             160
Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys
                                    170
                                                         175
                165
Ala Pro Cys Gly Gln Leu Gly Val Pro Gly Val Tyr Thr Asn Leu Cys
            180
                                185
Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Xaa Ser
                            200
      <210> 177
      <211> 1119
      <212> DNA
      <213> Homo sapien
      <400> 177
gegeactege agecetggea ggeggeactg gteatggaaa aegaattgtt etgeteggge
                                                                         60
gtcctggtgc atccgcagtg ggtgctgtca gccgcacact gtttccagaa ctcctacacc
                                                                        120
atcgggctgg gcctgcacag tcttgaggcc gaccaagagc cagggagcca gatggtggag
                                                                       180
gecagectet eegtacggea eccagagtae aacagaeeet tgetegetaa egaceteatg
                                                                        240
ctcatcaagt tggacgaatc cgtgtccgag tctgacacca tccggagcat cagcattgct
                                                                        300
tegeagtgee ctacegeggg gaactettge etegtttetg getggggtet getggegaac
                                                                        360
gatgctgtga ttgccatcca gtcccagact gtgggaggct gggagtgtga gaagctttcc
                                                                        420
caaccctggc agggttgtac catttcggca acttccagtg caaggacgtc ctgctgcatc
                                                                        480
ctcactgggt gctcactact gctcactgca tcacccggaa cactgtgatc aactagccag
                                                                        540
caccatagtt ctccgaagtc agactatcat gattactgtg ttgactgtgc tgtctattgt
                                                                        600
```

660

720

actaaccatq ccqatqttta qqtqaaatta qcqtcacttq gcctcaacca tcttggtatc

cagttatect cactgaattg agattteetg etteagtgte agecatteee acataattte

```
tgacctacag aggtgaggga tcatatagct cttcaaggat gctggtactc ccctcacaaa
                                                                        780
                                                                        840
ttcatttctc ctqttqtaqt gaaaggtgcg ccctctggag cctcccaggg tgggtgtgca
ggtcacaatg atgaatgtat gatcgtgttc ccattaccca aagcctttaa atccctcatg
                                                                        900
ctcagtacac cagggcaggt ctagcatttc ttcatttagt gtatgctgtc cattcatgca
                                                                        960
accacctcag gactcctgga ttctctgcct agttgagctc ctgcatgctg cctccttggg
                                                                       1020
                                                                       1080
qaqqtqaqqq aqaqqqccca tggttcaatg ggatctgtgc agttgtaaca cattaggtgc
                                                                       1119
ttaataaaca gaagctgtga tgttaaaaaa aaaaaaaaa
      <210> 178
      <211> 164
      <212> PRT
      <213> Homo sapien
      <220>
      <221> VARIANT
      <222> (1)...(164)
      <223> Xaa = Any Amino Acid
      <400> 178
Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp
                                                         15
                 5
                                     10
Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu
            20
Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val
                            40
                                                 45
Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu Leu
                        55
                                             60
Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser
                    70
                                         75
Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly
                                     90
                85
Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Asp Ala Val
                                 105
            100
                                                     110
Ile Ala Ile Gln Ser Xaa Thr Val Gly Gly Trp Glu Cys Glu Lys Leu
                                                 125
        115
                            120
Ser Gln Pro Trp Gln Gly Cys Thr Ile Ser Ala Thr Ser Ser Ala Arg
                        135
                                             140
Thr Ser Cys Cys Ile Leu Thr Gly Cys Ser Leu Leu Thr Ala Ser
                                         155
145
Pro Gly Thr Leu
      <210> 179
      <211> 250
      <212> DNA
      <213> Homo sapien
      <400> 179
                                                                         60
ctggagtgcc ttggtgtttc aagcccctgc aggaagcaga atgcaccttc tgaggcacct
ccagetgeec eeggeegggg gatgegagge teggageace ettgeeegge tgtgattget
                                                                        120
gccaggcact gttcatctca gcttttctgt ccctttgctc ccggcaagcg cttctgctga
                                                                        180
aagttcatat ctggagcctg atgtcttaac gaataaaggt cccatgctcc acccgaaaaa
                                                                        240
                                                                        250
aaaaaaaaa
      <210> 180
```

```
<211> 202
      <212> DNA
      <213> Homo sapien
      <400> 180
actaqtccaq tqtqqtqqaa ttccattqtq ttqqqcccaa cacaatggct acctttaaca
                                                                        60
                                                                        120
tcacccagac cccqccctq cccqtqcccc acqctqctqc taacqacaqt atgatqctta
                                                                        180
ctctqctact cggaaactat ttttatgtaa ttaatgtatg ctttcttgtt tataaatgcc
                                                                        202
tgatttaaaa aaaaaaaaaa aa
      <210> 181
      <211> 558
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (558)
      <223> n = A, T, C or G
      <400> 181
                                                                        60
tccytttgkt naggtttkkg agacamccck agacctwaan ctgtgtcaca gacttcyngg
aatgtttagg cagtgctagt aatttcytcg taatgattct gttattactt tcctnattct
                                                                        120
ttattcctct ttcttctgaa gattaatgaa gttgaaaatt gaggtggata aatacaaaaa
                                                                        180
ggtagtgtga tagtataagt atctaagtgc agatgaaagt gtgttatata tatccattca
                                                                        240
aaattatgca agttagtaat tactcagggt taactaaatt actttaatat gctgttgaac
                                                                        300
ctactctgtt ccttggctag aaaaaattat aaacaggact ttgttagttt gggaagccaa
                                                                        360
attgataata ttctatgttc taaaagttgg gctatacata aattattaag aaatatggaw
                                                                        420
ttttattccc aggaatatgg kgttcatttt atgaatatta cscrggatag awgtwtgagt
                                                                        480
aaaaycagtt ttggtwaata ygtwaatatg tcmtaaataa acaakgcttt gacttatttc
                                                                        540
                                                                        558
caaaaaaaa aaaaaaaa
      <210> 182
      <211> 479
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(479)
      <223> n = A, T, C or G
      <400> 182
                                                                         60
acagggwttk grggatgcta agsccccrga rwtygtttga tccaaccctg gcttwttttc
agaggggaaa atggggccta gaagttacag mscatytagy tggtgcgmtg gcacccctgg
                                                                        120
cstcacacag astcccgagt agctgggact acaggcacac agtcactgaa gcaggccctg
                                                                        180
ttwgcaattc acgttgccac ctccaactta aacattcttc atatgtgatg tccttagtca
                                                                        240
                                                                        300
ctaaggttaa actttcccac ccagaaaagg caacttagat aaaatcttag agtactttca
tactmitteta agteetette eageeteaet kkgagteetm eytgggggtt gataggaant
                                                                        360
ntctcttggc tttctcaata aartctctat ycatctcatg tttaatttgg tacgcatara
                                                                        420
awtgstgara aaattaaaat gttctggtty mactttaaaa araaaaaaaa aaaaaaaaa
                                                                        479
      <210> 183
      <211> 384
      <212> DNA
      <213> Homo sapien
```

```
<400> 183
aggogggago agaagotaaa gocaaagooo aagaagagtg goagtgocag cactggtgoo
                                                                         60
                                                                        120
agtaccagta ccaataacag tgccagtgcc agtgccagca ccagtggtgg cttcagtgct
                                                                        180
qqtqccaqcc tgaccgccac tctcacattt gggctcttcg ctggccttgg tggagctggt
                                                                        240
qccaqcacca qtqqcaqctc tggtgcctgt ggtttctcct acaagtgaga ttttagatat
                                                                        300
tqttaatcct qccaqtcttt ctcttcaagc cagggtgcat cctcagaaac ctactcaaca
cagcactcta ggcagccact atcaatcaat tgaagttgac actctgcatt aratctattt
                                                                        360
                                                                        384
gccatttcaa aaaaaaaaaa aaaa
      <210> 184
      <211> 496
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (496)
      <223> n = A, T, C or G
      <400> 184
accqaattqq qaccqctqqc ttataaqcqa tcatqtyynt ccrgtatkac ctcaacgagc
                                                                         60
agggagatcg agtctatacg ctgaagaaat ttgacccgat gggacaacag acctgctcag
                                                                        120
                                                                        180
cccatcctgc tcggttctcc ccagatgaca aatactctsg acaccgaatc accatcaaga
aacgettcaa ggtgetcatg acccagcaac cgcgccctgt cctctgaggg tcccttaaac
                                                                        240
                                                                        300
tgatgtcttt tctgccacct gttacccctc ggagactccg taaccaaact cttcggactg
tgagccctga tgcctttttg ccagccatac tctttggcat ccagtctctc gtggcgattg
                                                                        360
                                                                        420
attatgettg tgtgaggeaa teatggtgge ateacceata aagggaacae atttgaettt
                                                                        480
tttttctcat attttaaatt actacmagaw tattwmagaw waaatgawtt gaaaaactst
                                                                        496
taaaaaaaa aaaaaa
      <210> 185
      <211> 384
      <212> DNA
      <213> Homo sapien
      <400> 185
gctggtagcc tatggcgkgg cccacggagg ggctcctgag gccacggrac agtgacttcc
                                                                         60
                                                                        120
caagtateyt gegesgegte ttetacegte cetacetgea gatetteggg cagatteece
                                                                        180
aggaggacat ggacgtggcc ctcatggagc acagcaactg ytcgtcggag cccggcttct
                                                                        240
gggcacaccc tectggggcc caggegggca cetgegtete ccagtatgcc aactggctgg
tggtgctgct cctcgtcatc ttcctgctcg tggccaacat cctgctggtc aacttgctca
                                                                        300
ttgccatgtt cagttacaca ttcggcaaag tacagggcaa cagcgatctc tactgggaag
                                                                        360
                                                                        384
gcgcagcgtt accgcctcat ccgg
      <210> 186
      <211> 577
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(577)
      <223> n = A, T, C or G
      <400> 186
                                                                         60
gagttagete etecaeaace ttgatgaggt egtetgeagt ggeetetege tteataeege
                                                                        120
tnecategte atactgtagg tttgecacea cyteetggea tettggggeg gentaatatt
```

```
ccaggaaact ctcaatcaag tcaccgtcga tgaaacctgt gggctggttc tgtcttccgc
                                                                       180
                                                                       240
teggtgtgaa aggateteee agaaggagtg etegatette eecacaettt tgatgaettt
                                                                       300
attgagtcga ttctgcatgt ccagcaggag gttgtaccag ctctctgaca gtgaggtcac
caqcectate atqccqttqa mcqtqccqaa qarcaccqaq ccttqtqtqq qqqkkqaagt
                                                                       360
                                                                       420
ctcacccaga ttctqcatta ccaqaqaqcc qtqqcaaaaq acattqacaa actcqcccaq
qtqqaaaaaq amcamctcct qqarqtqctn qccqctcctc qtcmqttqqt qqcaqcqctw
                                                                       480
tccttttgac acacaaacaa gttaaaggca ttttcagccc ccagaaantt gtcatcatcc
                                                                       540
                                                                       577
aagatntcgc acagcactna tccagttggg attaaat
      <210> 187
      <211> 534
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(534)
      <223> n = A, T, C or G
      <400> 187
                                                                        60
aacatcttcc tgtataatgc tgtgtaatat cgatccgatn ttgtctgstg agaatycatw
                                                                       120
actkqqaaaa qmaacattaa aqcctqqaca ctqqtattaa aattcacaat atqcaacact
                                                                       180
ttaaacagtg tgtcaatctg ctcccyynac tttgtcatca ccagtctggg aakaagggta
tgccctattc acacctgtta aaagggcgct aagcattttt gattcaacat ctttttttt
                                                                       240
gacacaagtc cgaaaaaagc aaaagtaaac agttatyaat ttgttagcca attcactttc
                                                                       300
ttcatgggac agagccatyt gatttaaaaa gcaaattgca taatattgag cttygggagc
                                                                       360
tgatatttga geggaagagt ageettteta etteaceaga cacaacteec ttteatattg
                                                                       420
qgatqttnac naaaqtwatq tctctwacaq atqqqatqct tttqtqqcaa ttctqttctq
                                                                       480
                                                                       534
aggatetece agtttattta ceaettgeae aagaaggegt tttetteete agge
      <210> 188
      <211> 761
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(761)
     <223> n = A, T, C or G
      <400> 188
agaaaccagt atctctnaaa acaacctctc ataccttgtg gacctaattt tgtgtgcgtg
                                                                        60
tgtgtgtgcg cgcatattat atagacaggc acatcttttt tacttttgta aaagcttatg
                                                                       120
cctctttggt atctatatct gtgaaagttt taatgatctg ccataatgtc ttggggacct
                                                                       180
ttgtcttctg tgtaaatggt actagagaaa acacctatnt tatgagtcaa tctagttngt
                                                                       240
tttattcgac atgaaggaaa tttccagatn acaacactna caaactctcc ctkgackarg
                                                                       300
ggggacaaag aaaagcaaaa ctgamcataa raaacaatwa cctggtgaga arttgcataa
                                                                       360
acagaaatwr ggtagtatat tgaarnacag catcattaaa rmgttwtktt wttctccctt
                                                                       420
gcaaaaaaca tgtacngact teeegttgag taatgeeaag ttgttttttt tatnataaaa
                                                                       480
cttgcccttc attacatgtt tnaaagtggt gtggtgggcc aaaatattga aatgatggaa
                                                                       540
ctgactgata aagctgtaca aataagcagt gtgcctaaca agcaacacag taatgttgac
                                                                       600
atgcttaatt cacaaatgct aatttcatta taaatgtttg ctaaaataca ctttgaacta
                                                                       660
tttttctgtn ttcccagagc tgagatntta gattttatgt agtatnaagt gaaaaantac
                                                                       720
qaaaataata acattgaaga aaaananaaa aaanaaaaaa a
                                                                       761
      <210> 189
      <211> 482
```

```
<212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(482)
      \langle 223 \rangle n = A, T, C or G
      <400> 189
                                                                         60
tttttttttt tttgccgatn ctactatttt attgcaggan gtgggggtgt atgcaccgca
caccgggget atnagaagca agaaggaagg agggagggca cagccccttg ctgagcaaca
                                                                        120
                                                                        180
aagccgcctg ctgccttctc tgtctgtctc ctggtgcagg cacatgggga gaccttcccc
aaggcagggg ccaccagtcc aggggtggga atacaggggg tgggangtgt gcataagaag
                                                                        240
tgataggcac aggccacccg gtacagaccc ctcggctcct gacaggtnga tttcgaccag
                                                                        300
gtcattgtgc cctgcccagg cacagcgtan atctggaaaa gacagaatgc tttccttttc
                                                                        360
aaatttggct ngtcatngaa ngggcanttt tccaanttng gctnggtctt ggtacncttg
                                                                        420
                                                                        480
qttcggccca gctccncgtc caaaaantat tcacccnnct ccnaattgct tgcnggnccc
                                                                        482
CC
      <210> 190
      <211> 471
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(471)
      <223> n = A, T, C or G
      <400> 190
tttttttttt ttttaaaaca gtttttcaca acaaaattta ttagaagaat agtggttttg
                                                                         60
                                                                        120
aaaactctcq catccaqtqa qaactaccat acaccacatt acagctngga atgtnctcca
                                                                        180
aatgtctgqt caaatgatac aatggaacca ttcaatctta cacatgcacg aaagaacaag
                                                                        240
cgcttttgac atacaatgca caaaaaaaaa aggggggggg gaccacatgg attaaaattt
taaqtactca tcacatacat taaqacacaq ttctaqtcca qtcnaaaatc agaactgcnt
                                                                        300
tgaaaaattt catgtatgca atccaaccaa agaacttnat tggtgatcat gantneteta
                                                                        360
                                                                        420
ctacatcnac cttgatcatt gccaggaacn aaaagttnaa ancacncngt acaaaaanaa
                                                                        471
tetgtaattn antteaacet eegtaengaa aaatnttnnt tatacaetee e
      <210> 191
      <211> 402
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(402)
      <223> n = A, T, C or G
      <400> 191
gagggattga aggtctgttc tastgtcggm ctgttcagcc accaactcta acaagttgct
                                                                         60
gtcttccact cactgtctgt aagcttttta acccagacwg tatcttcata aatagaacaa
                                                                        120
attetteace agreacatet tetaggacet tittggatte agriagtata agetetteea
                                                                        180
cttcctttgt taagacttca tctggtaaag tcttaagttt tgtagaaagg aattyaattg
                                                                        240
                                                                        300
ctcqttctct aacaatgtcc tctccttgaa gtatttggct gaacaaccca cctaaagtcc
ctttgtgcat ccattttaaa tatacttaat agggcattgk tncactaggt taaattctgc
                                                                        360
                                                                        402
aagagtcatc tgtctgcaaa agttgcgtta gtatatctgc ca
```

```
<210> 192
      <211> 601
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(601)
      <223> n = A, T, C or G
      <400> 192
gageteggat ceaataatet ttgtetgagg geageaeaca tatneagtge eatggnaact
                                                                         60
ggtctacccc acatgggagc agcatgccgt agntatataa ggtcattccc tgagtcagac
                                                                        120
atgcytyttt gaytaccgtg tgccaagtgc tggtgattct yaacacacyt ccatcccgyt
                                                                        180
cttttgtgga aaaactggca cttktctgga actagcarga catcacttac aaattcaccc
                                                                        240
                                                                        300
acqaqacact tqaaaqqtqt aacaaaqcqa ytcttqcatt qctttttqtc cctccqqcac
cagttgtcaa tactaacccg ctggtttgcc tccatcacat ttgtgatctg tagctctgga
                                                                        360
tacatetect gacagtactg aagaacttet tettttgttt caaaageare tettggtgee
                                                                        420
tgttggatca ggttcccatt tcccagtcyg aatgttcaca tggcatattt wacttcccac
                                                                        480
aaaacattqc qatttqaqqc tcaqcaacaq caaatcctqt tccqqcattq qctqcaagaq
                                                                        540
                                                                        600
cctcgatgta gccggccagc gccaaggcag gcgccgtgag ccccaccagc agcagaagca
                                                                        601
      <210> 193
      <211> 608
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(608)
     <223> n = A, T, C or G
      <400> 193
atacageeca nateecacea egaagatgeg ettgttgaet gagaacetga tgeggteaet
                                                                         60
ggtcccgctg tagccccagc gactctccac ctgctggaag cggttgatgc tgcactcytt
                                                                        120
cccaacgcag gcagmagcgg gsccggtcaa tgaactccay tcgtggcttg gggtkgacgg
                                                                        180
tkaagtgcag gaagaggctg accacctcgc ggtccaccag gatgcccgac tgtgcgggac
                                                                        240
ctgcagcgaa actcctcgat ggtcatgagc gggaagcgaa tgaggcccag ggccttgccc
                                                                        300
agaacettee geetgttete tggegteace tgeagetget geegetgaca eteggeeteg
                                                                        360
gaccagegga caaacggert tgaacageeg caceteaegg atgeeeagtg tgtegegete
                                                                        420
caggammgsc accagegtgt ccaggtcaat gteggtgaag cccteegegg gtratggegt
                                                                        480
ctgcagtgtt tttgtcgatg ttctccaggc acaggctggc cagctgcggt tcatcgaaga
                                                                        540
gtcgcgcctg cgtgagcagc atgaaggcgt tgtcggctcg cagttcttct tcaggaactc
                                                                        600
                                                                        608
cacgcaat
      <210> 194
      <211> 392
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(392)
      <223> n = A, T, C or G
```

<212> DNA

```
<400> 194
                                                                         60
qaacqqctqq accttqcctc qcattqtqct tqctqgcaqq gaataccttg gcaagcagyt
                                                                        120
ccaqtccqaq caqccccaqa ccqctqccqc ccqaaqctaa gcctqcctct ggccttcccc
tecgeetcaa tgeagaacca gtagtgggag caetgtgttt agagttaaga gtgaacaetg
                                                                        180
tttgatttta cttgggaatt tcctctgtta tatagctttt cccaatgcta atttccaaac
                                                                        240
aacaacaaca aaataacatg tttgcctgtt aagttgtata aaagtaggtg attctgtatt
                                                                        300
taaaqaaaat attactqtta catatactgc ttgcaatttc tgtatttatt gktnctstgg
                                                                        360
                                                                        392
aaataaatat agttattaaa ggttgtcant cc
      <210> 195
      <211> 502
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(502)
      <223> n = A, T, C \text{ or } G
      <400> 195
                                                                         60
ccsttkgagg ggtkaggkyc cagttyccga gtggaagaaa caggccagga gaagtgcgtg
                                                                        120
ccqaqctqaq qcaqatqttc ccacaqtqac ccccaqagcc stgggstata gtytctgacc
                                                                        180
cctcncaagq aaagaccacs ttctggggac atgggctgga gggcaggacc tagaggcacc
                                                                        240
aaqqqaaqqc cccattccqq gqstqttccc cgaggaggaa gggaaggggc tctgtgtgcc
                                                                        300
ccccasgagg aagaggccet gagteetggg atcagacace cetteaegtg tatecccaca
caaatgcaag ctcaccaagg tcccctctca gtccccttcc stacaccctg amcggccact
                                                                        360
gscscacacc cacccagage acgccacccg ccatggggar tgtgctcaag gartcgcngg
                                                                        420
gcarcgtgga catctngtcc cagaaggggg cagaatctcc aatagangga ctgarcmstt
                                                                        480
                                                                        502
gctnanaaaa aaaaanaaaa aa
      <210> 196
      <211> 665
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(665)
      <223> n = A, T, C or G
      <400> 196
                                                                         60
ggttacttgg tttcattgcc accacttagt ggatgtcatt tagaaccatt ttgtctgctc
cctctggaag ccttgcgcag agcggacttt gtaattgttg gagaataact gctgaatttt
                                                                        120
wagctgtttk gagttgatts gcaccactgc acccacaact tcaatatgaa aacyawttga
                                                                        180
actwatttat tatcttgtga aaagtataac aatgaaaatt ttgttcatac tgtattkatc
                                                                        240
aagtatgatg aaaagcaawa gatatatatt cttttattat gttaaattat gattgccatt
                                                                        300
attaatcggc aaaatgtgga gtgtatgttc ttttcacagt aatatatgcc ttttgtaact
                                                                        360
tcacttggtt attttattgt aaatgartta caaaattctt aatttaagar aatggtatgt
                                                                        420
watatttatt tcattaattt ctttcctkgt ttacgtwaat tttgaaaaga wtgcatgatt
                                                                        480
tettgacaga aategatett gatgetgtgg aagtagtttg acceacatee etatgagttt
                                                                        540
ttcttagaat gtataaaggt tgtagcccat cnaacttcaa agaaaaaaat gaccacatac
                                                                        600
tttgcaatca ggctgaaatg tggcatgctn ttctaattcc aactttataa actagcaaan
                                                                        660
aagtg
                                                                        665
      <210> 197
      <211> 492
```

```
<213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(492)
     <223> n = A, T, C or G
      <400> 197
ttttnttttt tttttttgc aggaaggatt ccatttattg tggatgcatt ttcacaatat
                                                                        60
                                                                       120
atgtttattg gagcgatcca ttatcagtga aaagtatcaa gtgtttataa natttttagg
                                                                       180
aaggcagatt cacagaacat getngtenge ttgcagtttt acctegtana gatnacagag
aattatagtc naaccagtaa acnaggaatt tacttttcaa aagattaaat ccaaactgaa
                                                                       240
caaaattcta ccctgaaact tactccatcc aaatattgga ataanagtca gcagtgatac
                                                                       300
attetettet gaacittaga ttttetagaa aaatatgtaa tagtgateag gaagagetet
                                                                       360
                                                                       420
tqttcaaaag tacaacnaag caatgttccc ttaccatagg ccttaattca aactttgatc
                                                                       480
catttcactc ccatcacggg agtcaatgct acctgggaca cttgtatttt gttcatnctg
                                                                       492
ancntggctt aa
      <210> 198
      <211> 478
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
     <222> (1)...(478)
     <223> n = A, T, C or G
      <400> 198
tttnttttqn atttcantct qtannaanta ttttcattat gtttattana aaaatatnaa
                                                                        60
tgtntccacn acaaatcatn ttacntnagt aagaggccan ctacattgta caacatacac
                                                                       120
tgaqtatatt ttgaaaaqga caagtttaaa gtanacncat attgccganc atancacatt
                                                                       180
tatacatggc ttgattgata tttagcacag canaaactga gtgagttacc agaaanaaat
                                                                       240
natatatgic aatcngattt aagatacaaa acagatccta tggtacatan catcntgtag
                                                                       300
qaqttqtqqc tttatqttta ctqaaaqtca atqcaqttcc tqtacaaaga gatgqccqta
                                                                       360
agcattctag tacctctact ccatggttaa gaatcgtaca cttatgttta catatgtnca
                                                                       420
gggtaagaat tgtgttaagt naanttatgg agaggtccan gagaaaaatt tgatncaa
                                                                       478
      <210> 199
      <211> 482
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (482)
      <223> n = A, T, C or G
      <400> 199
agtgacttgt cctccaacaa aaccccttga tcaagtttgt ggcactgaca atcagaccta
                                                                        60
tgctagttcc tgtcatctat tcgctactaa atgcagactg gaggggacca aaaaggggca
                                                                       120
tcaactccag ctggattatt ttggagcctg caaatctatt cctacttgta cggactttga
                                                                       180
                                                                       240
agtgattcag tttcctctac ggatgagaga ctggctcaag aatatcctca tgcagcttta
                                                                       300
tgaaqccnac tctgaacacg ctggttatct nagatgagaa ncagagaaat aaagtcnaga
aaatttacct qgangaaaaq aggctttngg ctggggacca tcccattgaa ccttctctta
                                                                       360
anggacttta agaanaaact accacatgtn tgtngtatcc tggtgccngg ccgtttantg
                                                                       420
                                                                       480
aacntngacn ncaccettnt qqaatanant cttgacnqcn teetqaactt geteetetge
```

```
482
ga
     <210> 200
     <211> 270
     <212> DNA
     <213> Homo sapien
     <220>
     <221> misc feature
      <222> (1)...(270)
     <223> n = A, T, C or G
      <400> 200
                                                                      60
cggccgcaag tgcaactcca gctggggccg tgcggacgaa gattctgcca gcagttggtc
cgactgcgac gacggcggcg gcgacagtcg caggtgcagc gcgggcgcct ggggtcttgc
                                                                     120
aaggetgage tgacgeegea gaggtegtgt caegteecae gacettgaeg eegtegggga
                                                                     180
cagceggaac agageceggt gaangeggga ggeetegggg ageceetegg gaagggegge
                                                                     240
                                                                     270
ccgagagata cgcaggtgca ggtggccgcc
     <210> 201
      <211> 419
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(419)
      <223> n = A, T, C or G
      <400> 201
                                                                      60
tttttttttt ttttggaatc tactgcgagc acagcaggtc agcaacaagt ttattttgca
qctaqcaaqq taacaqqqta qqqcatqqtt acatqttcag qtcaacttcc tttgtcgtgg
                                                                     120
ttgattggtt tgtctttatg ggggcggggt ggggtagggg aaancgaagc anaantaaca
                                                                     180
tqqaqtqqqt qcacctccc tqtaqaacct qqttacnaaa gcttggggca gttcacctgg
                                                                     240
totqtqaccq toattttctt qacatcaatq ttattaqaaq tcaggatatc ttttagagag
                                                                     300
tccactgtnt ctggagggag attagggttt cttgccaana tccaancaaa atccacntga
                                                                     360
                                                                     419
aaaagttgga tgatncangt acngaatacc ganggcatan ttctcatant cggtggcca
      <210> 202
      <211> 509
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(509)
      <223> n = A, T, C or G
      <400> 202
60
tggcacttaa tccattttta tttcaaaatg tctacaaant ttnaatncnc cattatacng
                                                                     120
                                                                     180
gtnattttnc aaaatctaaa nnttattcaa atntnagcca aantccttac ncaaatnnaa
tacnoncaaa aatcaaaaat atacntntot ttoagcaaac ttngttacat aaattaaaaa
                                                                     240
                                                                     300
aatatatacq qctqqtqttt tcaaaqtaca attatcttaa cactqcaaac atntttnnaa
qqaactaaaa taaaaaaaaa cactnccqca aaqqttaaaq qqaacaacaa attcntttta
                                                                     360
caacancnnc nattataaaa atcatatctc aaatcttagg ggaatatata cttcacacng
                                                                     420
ggatcttaac ttttactnca ctttqtttat ttttttanaa ccattqtntt gggcccaaca
                                                                     480
```

```
caatggnaat nccnccncnc tggactagt
                                                                     509
      <210> 203
      <211> 583
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(583)
      <223> n = A, T, C or G
      <400> 203
tttttttttt tttttttga cccccctctt ataaaaaaca agttaccatt ttattttact
                                                                      60
                                                                     120
tacacatatt tattttataa ttggtattag atattcaaaa ggcagctttt aaaatcaaac
taaatggaaa ctgccttaga tacataattc ttaggaatta gcttaaaatc tgcctaaagt
                                                                     180
gaaaatette tetagetett ttgactgtaa atttttgact ettgtaaaac atccaaatte
                                                                     240
atttttcttg tctttaaaat tatctaatct ttccattttt tccctattcc aagtcaattt
                                                                     300
gcttctctag cctcatttcc tagctcttat ctactattag taagtggctt ttttcctaaa
                                                                     360
agggaaaaca ggaagagana atggcacaca aaacaaacat tttatattca tatttctacc
                                                                     420
tacgttaata aaatagcatt ttgtgaagcc agctcaaaag aaggcttaga tccttttatg
                                                                     480
tocattttag toactaaacg atatonaaag tgocagaatg caaaaggttt gtgaacattt
                                                                     540
                                                                     583
attcaaaagc taatataaga tatttcacat actcatcttt ctg
      <210> 204
      <211> 589
      <212> DNA
      <213> Homo sapien
     <220>
     <221> misc feature
     <222> (1)...(589)
     <223> n = A, T, C \text{ or } G
      <400> 204
60
tttcactctc tagatagggc atgaagaaaa ctcatctttc cagctttaaa ataacaatca
                                                                     120
aatctcttat gctatateat attttaagtt aaactaatga gtcactggct tatcttctcc
                                                                     180
tgaaggaaat ctgttcattc ttctcattca tatagttata tcaagtacta ccttgcatat
                                                                     240
tgagaggttt ttcttctcta tttacacata tatttccatg tgaatttgta tcaaaccttt
                                                                     300
attttcatgc aaactagaaa ataatgtntt cttttgcata agagaagaga acaatatnag
                                                                     360
cattacaaaa ctgctcaaat tgtttgttaa gnttatccat tataattagt tnggcaggag
                                                                     420
ctaatacaaa tcacatttac ngacnagcaa taataaaact gaagtaccag ttaaatatcc
                                                                     480
aaaataatta aaggaacatt tttagcctgg gtataattag ctaattcact ttacaagcat
                                                                     540
ttattnagaa tgaattcaca tgttattatt ccntagccca acacaatgg
                                                                     589
      <210> 205
      <211> 545
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(545)
      <223> n = A, T, C or G
      <400> 205
```

```
tttttntttt ttttttcagt aataatcaga acaatattta tttttatatt taaaattcat
                                                                         60
                                                                        120
agaaaagtgc cttacattta ataaaagttt gtttctcaaa gtgatcagag gaattagata
                                                                        180
tngtcttgaa caccaatatt aatttgagga aaatacacca aaatacatta agtaaattat
ttaagatcat agagcttqta agtgaaaaga taaaatttga cctcagaaac tctgagcatt
                                                                        240
aaaaatccac tattagcaaa taaattacta tgqacttctt gctttaattt tgtqatgaat
                                                                        300
atggggtgtc actggtaaac caacacattc tgaaggatac attacttagt gatagattct
                                                                        360
tatgtacttt gctanatnac gtggatatga gttgacaagt ttctctttct tcaatctttt
                                                                        420
aaggggcnga ngaaatgagg aagaaaagaa aaggattacg catactgttc tttctatngg
                                                                        480
aaggattaga tatgttteet ttgecaatat taaaaaaata ataatgttta etactagtga
                                                                        540
                                                                        545
aaccc
      <210> 206
      <211> 487
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(487)
      <223> n = A, T, C or G
      <400> 206
tttttttttt ttttttagtc aagtttctna tttttattat aattaaagtc ttggtcattt
                                                                         60
catttattag ctctgcaact tacatattta aattaaagaa acgttnttag acaactgtna
                                                                        120
caatttataa atgtaaggtg ccattattga gtanatatat teeteeaaga gtggatgtgt
                                                                        180
cccttctccc accaactaat gaancagcaa cattagttta attttattag tagatnatac
                                                                        240
actgctgcaa acgctaattc tcttctccat ccccatgtng atattgtgta tatgtgtgag
                                                                        300
ttggtnagaa tgcatcanca atctnacaat caacagcaag atgaagctag gcntgggctt
                                                                        360
tcggtgaaaa tagactgtgt ctgtctgaat caaatgatct gacctatcct cggtggcaag
                                                                        420
aactettega acceptteet caaaggenge tgecacattt gtggentetn ttgcacttgt
                                                                        480
                                                                        487
ttcaaaa
      <210> 207
      <211> 332
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(332)
      \langle 223 \rangle n = A, T, C or G
      <400> 207
tgaattggct aaaagactgc atttttanaa ctagcaactc ttatttcttt cctttaaaaa
                                                                         60
tacatagcat taaatcccaa atcctattta aagacctgac agcttgagaa ggtcactact
                                                                        120
qcatttatag gaccttctgg tggttctgct gttacntttg aantctgaca atccttgana
                                                                        180
atctttqcat gcagaggagg taaaaggtat tggattttca cagaggaana acacagcgca
                                                                        240
gaaatgaagg ggccaggctt actgagcttg tccactggag ggctcatggg tgggacatgg
                                                                        300
aaaagaagge ageetaggee etggggagee ca
                                                                        332
      <210> 208
      <211> 524
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
```

```
<222> (1)...(524)
      <223> n = A, T, C \text{ or } G
      <400> 208
                                                                         60
agggcgtggt gcggagggcg ttactgtttt gtctcagtaa caataaatac aaaaagactg
gttgtgttcc ggccccatcc aaccacgaag ttgatttctc ttgtgtgcag agtgactgat
                                                                        120
tttaaaqqac atqqaqcttq tcacaatgtc acaatgtcac agtgtgaagg gcacactcac
                                                                        180
                                                                        240
tcccqcqtqa ttcacattta qcaaccaaca atagctcatg agtccatact tgtaaatact
                                                                        300
tttqqcaqaa tacttnttga aacttgcaga tgataactaa gatccaagat atttcccaaa
                                                                        360
qtaaataqaa qtqqqtcata atattaatta cctqttcaca tcaqcttcca tttacaagtc
                                                                        420
atgageccag acactgaeat caaactaage ceaettagae teeteaceae cagtetgtee
tgtcatcaga caggaggctg tcaccttgac caaattctca ccagtcaatc atctatccaa
                                                                        480
aaaccattac ctgatccact tccggtaatg caccaccttg gtga
                                                                        524
      <210> 209
      <211> 159
      <212> DNA
      <213> Homo sapien
      <400> 209
                                                                         60
qqqtqaqqaa atccaqaqtt qccatgqaga aaattccagt gtcagcattc ttgctccttg
                                                                        120
tgqccctctc ctacactctg qccagagata ccacagtcaa acctggagcc aaaaaggaca
                                                                        159
caaaqqactc tcqacccaaa ctqccccaqa ccctctcca
      <210> 210
      <211> 256
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(256)
      <223> n = A, T, C or G
      <400> 210
                                                                         60
actccctggc agacaaaggc agaggagaga gctctgttag ttctgtgttg ttgaactgcc
                                                                        120
actgaatttc tttccacttg gactattaca tgccanttga gggactaatg gaaaaacgta
tggggagatt ttanccaatt tangtntgta aatggggaga ctggggcagg cgggagagat
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                                                                        240
ttgcagggtg naaatgggan ggctggtttg ttanatgaac agggacatag gaggtaggca
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      <211> 264
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                                                                        180
atattcaaqc acatatqtta tatattattc agttccatqt ttatagccta gttaaggaga
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gtttatatat gcagcaacaa tattcaagcg cgacaacagg ttattgaact tgcccgccag
                                                                        180
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ttnaatttca ttcccattga cttgggatcc ttatcatcag ccagagagat tgaaaattta
cccctacnac tetttactet etgganaggg ccagtggtgg tagetataag ettggecaca
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      <211> 444
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tttatatatg cagcaacaat attcaagcgc gacaacaggt tattgaactt gcccgccagt
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                                                                        360
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                                                                        240
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qqcattctac aqtttqaqca aaatqcaatt aaatqtqqaa gqacaqcact gaaaaatttt
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atatccttca tgcttgtaaa gt
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      <211> 205
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cccctatcaa ctcccttttq taqtaaactt qgaaccttgg aaatgaccag gccaagactc
aggecteece agttetactg acetttgtee ttangtntna ngtecagggt tgetaggaaa
                                                                        180
                                                                        205
anaaatcagc agacacaggt gtaaa
      <210> 219
      <211> 114
      <212> DNA
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      <400> 219
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accacgaagt tgatttctct tgtgtgcaga gtgactgatt ttaaaggaca tgga
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      <212> DNA
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                                                                        167
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      <211> 351
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                                                                         120
atgtttgctg aattaaagga tggatgaaaa aaattaataa tgaatttttg cataatccaa
                                                                         180
ttttctcttt tatatttcta gaagaagttt ctttgagcct attagatccc gggaatcttt
                                                                         240
                                                                         300
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ttaaaatgtc tgtgccaaaa ttttgtattt tatttggaga cttcttatca aaagtaatgc
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                                                                       240
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                                                                       180
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                                                                       240
                                                                       300
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                                                                       120
                                                                       180
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                                                                       240
cagatggtgg aggccagcct ctccgtacgg cacccagagt acaacagacc cttgctcgct
                                                                       300
aacqacctca tgctcatcaa gttggacgaa tccgtgtccg agtctgacac catccggagc
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                                                                       480
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                                                                       1080
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cattgggatc aatgaaaagc ttcaagaaat cttcaggctc actctcttga aggcccggaa cctctggagg ggggcagtgg aatcccagct ccaggacgga tcctgtcgaa aagatatcct c	240 300 301
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acceccaaaa geetggacae ettgageaca eagttatgae eaggacagae teatetetat
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                                                                        240
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gtggcctctc ggcctggtta gcaagaacat tcagggtagg cctaagttan tcgtgttagt
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tottacctag tocagtotac cocctggagt tagaatggcc atcctgaagt gaaaagtaat
                                                                        240
gtcacattac tecetteagt gatttettgt agaagtgeca atecetgaat gecaceaaga
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tettaatett eacatettta atettatete tittgaeteet etitaeaceg gagaaggete
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cccagggcaa caagaatcca ataccaggac tgggcaaaat cttcaaagat cttaacactg
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atgtctcggg cattgaggct gtcaataana cgctgatccc ctgctgtatg gtggtgtcat
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gcaaagccat aaggaagccc aggattcctt gtgatcagga agtgggccag gaaggtctgt
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tecageteae ateteatetg catgeageae ggaceggatg egeceaetgg gtettggett
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agaactgtaa cagccacagt tggccatttc atgccaatgg cagcaaacaa caggattaac
                                                                        180
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                                                                        120
                                                                        180
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ggtgacatcc aatttcttct gataatttag attcctcaca accttcctag ttaagtgaag
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cctagacttc ctaaaccaga tcctctgggg ctggaacctg gcactctgca tttgtaatga
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qqqctttctq qtqcacacct aattttqtqc atctttqccc taaatcctgg attagtgccc
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<210> 266 <211> 301 <212> DNA <213> Homo sapien	1			
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<210> 267 <211> 301 <212> DNA <213> Homo sapien	1			
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ctcattctga ttcctctcct tcttttcttt caagttggct ttcctcaca aattcgcttc agcttgtctg ctttagccct catttccaga agcttcttct	t ccctctgttc t ctttggcatc	240 300 301
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tgaaccacag agccacagca tctctcctcc agatganaac c					240 300 301
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                                                                         180
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tcaagagact eccaggeete agegtacetg eccgggegge egetegaage egaattetge
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а
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taaagagaca gaagatagac attaacagat aaggcaactt atacattgag aatccaaatc
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caatacattt aaacatttgg gaaatgaggg ggacaaatgg aagccagatc aaatttgtgt
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      <211> 301
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                                                                         120
gaatcatggc actcctgata ctttcccaaa tcaacactct caatgcccca ccctcgtcct
                                                                         180
caccatagtg gggagactaa agtggccacg gatttgcctt angtgtgcag tgcgttctga
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<210> 279 <211> 301 <212> DNA <213> Homo sapien	
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120
tccaqaaccc aaaaattaaq aaattcaaaa agacattttq tqqqcacctq ctagcacaga
                                                                       180
agcgcagaag caaagcccag gcagaaccat gctaacctta cagctcagcc tgcacagaag
                                                                       240
cqcaqaaqca aaqcccaqqc agaaccatgc taaccttaca gctcagcctg cacagaagcg
                                                                       300
caqaaqcaaa qcccaqqcaq aacatqctaa ccttacagct cagcctgcac agaagcacag
                                                                       301
      <210> 283
      <211> 301
      <212> DNA
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cactttgagg gctttataat aatatgctgc ttgaaaaaaa aaatgtgtag ttgatactca
                                                                        120
gtgcatctcc agacatagta aggggttgct ctgaccaatc aggtgatcat tttttctatc
                                                                       180
                                                                        240
acttcccagg ttttatgcaa aaattttgtt aaattctata atggtgatat gcatctttta
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ggaaacatat acatttttaa aaatctattt tatgtaagaa ctgacagacg aatttgcttt
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      <210> 284
      <211> 301
      <212> DNA
      <213> Homo sapien
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gcttcgtgtg tgggcaaagc aacatcttcc ctaaatatat attaccaaga aaagcaagaa
                                                                        120
gcagattagg tttttgacaa aacaaacagg ccaaaagggg gctgacctgg agcagagcat
                                                                        180
ggtgagaggc aaggcatgag agggcaagtt tgttgtggac agatctgtgc ctactttatt
                                                                        240
actggagtaa aagaaaacaa agttcattga tgtcgaagga tatatacagt gttagaaatt
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                                                                        301
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      <211> 301
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
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      <223> n = A, T, C or G
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aatgatcatt agtgttttaa aaaaaatact gaaaactcct tctgcatccc aatctctaac
                                                                        120
caggaaagca aatgctattt acagacctgc aagccctccc tcaaacnaaa ctatttctgg
                                                                        180
attaaatatq tetgaettet tttgaggtea caegaetagg caaatgetat ttaegatetg
                                                                        240
caaaagctgt ttgaagagtc aaagccccca tgtgaacacg atttctggac cctgtaacag
                                                                        300
                                                                        301
      <210> 286
      <211> 301
      <212> DNA
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tgtatattat ttttgcctta cagtggatca ttctagtagg aaaggacagt aagatttttt
                                                                        120
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atcaaaatgt gtcatgccag taagagatgt tatattettt teteatttet teeceaceca
                                                                        240
aaaataaqct accatataqc ttataaqtct caaatttttq ccttttacta aaatgtgatt
gtttctgttc attgtgtatg cttcatcacc tatattaggc aaattccatt ttttcccttq
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                                                                        301
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      <211> 301
      <212> DNA
      <213> Homo sapien
      <400> 287
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cccaqaagga acqtagagat cagatattac aacagetttg ttttgagggt tagaaatatg
                                                                        120
                                                                        180
aaatgatttg gttatgaacg cacagtttag gcagcagggc cagaatcctg accetctgcc
                                                                        240
ccqtqqttat ctcctccca gcttggctgc ctcatgttat cacagtattc cattttgttt
                                                                        300
qttqcatqtc ttqtqaaqcc atcaaqattt tctcqtctgt tttcctctca ttqgtaatgc
                                                                        301
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      <211> 301
      <212> DNA
      <213> Homo sapien
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agtcaatagg aagacaaatt ccagttccag ctcagtctgg gtatctgcaa agctgcaaaa
qatctttaaa qacaatttca agagaatatt tccttaaagt tggcaatttg gagatcatac
                                                                        180
                                                                        240
aaaaqcatct qcttttqtqa tttaatttag ctcatctggc cactggaaga atccaaacag
tctgccttaa ttttggatga atgcatgatg gaaattcaat aatttagaaa gttaaaaaaa
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                                                                        301
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      <211> 301
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (301)
      <223> n = A, T, C or G
      <400> 289
                                                                         60
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gettttgatg tetecaagta gtecacette atttaactet ttgaaactgt atcatetttg
                                                                        120
                                                                        180
ccaaqtaaqa qtqqtqqcct atttcaqctq ctttqacaaa atqactqqct cctqacttaa
                                                                        240
cqttctataa atgaatgtgc tgaagcaaag tgcccatggt ggcggcgaan aagagaaaga
tgtgttttgt tttggactet etgtggteee ttecaatget gtgggtttee aaccagngga
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                                                                        301
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      <211> 301
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
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<222> (1)...(301)
      <223> n = A, T, C or G
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                                                                         60
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tgactgatct gttcatttct ctcacagctc ttacccccaa aagcttttcc accctaagtg
                                                                        120
ttctqacctc cttttctaat cacagtaggg atagaggcag anccacctac aatgaacatg
                                                                        180
gagttctatc aagaggcaga aacagcacag aatcccagtt ttaccattcg ctagcagtgc
                                                                        240
                                                                        300
tgccttgaac aaaaacattt ctccatqtct cattttcttc atgcctcaag taacagtgag
                                                                        301
      <210> 291
      <211> 301
      <212> DNA
      <213> Homo sapien
      <400> 291
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tatatcaget agattttttt tetatgettt acetgetatg gaaaatttga cacattetge
                                                                        120
tttactcttt tgtttatagg tgaatcacaa aatgtatttt tatgtattct gtagttcaat
                                                                        180
                                                                        240
agccatggct gtttacttca tttaatttat ttagcataaa gacattatga aaaggcctaa
                                                                        300
acatgagett cactteecca ctaactaatt ageatetgtt atttettaac egtaatgeet
                                                                        301
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      <211> 301
      <212> DNA
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      <221> misc_feature
      <222> (1)...(301)
      \langle 223 \rangle n = A, T, C or G
      <400> 292
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tgtattaaat aatttttaag tttaaaagat aaaataccat cattttaaat gttggtattc
                                                                        120
aaaaccaaag natataaccg aaaggaaaaa cagatgagac ataaaatgat ttgcnagatg
                                                                        180
qqaaatataq tasttyatga atgitnatta aattccagtt ataatagtgg ctacacactc
                                                                        240
tcactacaca cacagacccc acagtcctat atgccacaaa cacatttcca taacttgaaa
                                                                        300
                                                                        301
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      <211> 301
      <212> DNA
      <213> Homo sapien
      <400> 293
                                                                          60
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ttgtgtagtc acttctgatt ctgacaatca atcaatcaat ggcctagagc actgactgtt
                                                                        120
aacacaaacg tcactagcaa agtagcaaca gctttaagtc taaatacaaa gctgttctgt
                                                                        180
gtgagaattt tttaaaaggc tacttgtata ataacccttg tcatttttaa tgtacctcgg
                                                                        240
                                                                        300
ccqcqaccac qctaaqccqa attctgcaga tatccatcac actggcggcc gctcgagcat
                                                                        301
      <210> 294
      <211> 301
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<212> DNA
     <213> Homo sapien
     <220>
     <221> misc feature
     <222> (1)...(301)
     <223> n = A, T, C or G
      <400> 294
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attcaataaa attaccttta ttcacacatc tcaaaacaat tctgcaaatt cttagtgaag
                                                                     120
tttaactata gtcacaganc ttaaatattc acattgtttt ctatgtctac tgaaaataag
                                                                     180
ttcactactt ttctgggata ttctttacaa aatcttatta aaattcctgg tattatcacc
                                                                     240
                                                                     300
cccaattata caqtaqcaca accaccttat gtagttttta catgatagct ctgtagaggt
                                                                     301
t.
      <210> 295
      <211> 305
      <212> DNA
      <213> Homo sapien
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                                                                      60
                                                                     120
ttggtttgtg aatccatctt gctttttccc cattggaact agtcattaac ccatctctga
                                                                     180
actggtagaa aaacrtctga agagctagtc tatcagcatc tgacaggtga attggatggt
                                                                     240
                                                                     300
tctcaqaacc atttcaccca gacagcctgt ttctatcctg tttaataaat tagtttgggt
                                                                     305
tctct
      <210> 296
      <211> 301
      <212> DNA
      <213> Homo sapien
      <400> 296
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                                                                      60
cacctagtag taaactaaaa ataaactgaa actttatgga atctgaagtt attttccttg
                                                                     120
attaaataga attaataaac caatatgagg aaacatgaaa ccatgcaatc tactatcaac
                                                                     180
tttgaaaaag tgattgaacg aaccacttag ctttcagatg atgaacactg ataagtcatt
                                                                     240
                                                                     300
tqtcattact ataaatttta aaatctgtta ataagatggc ctatagggag gaaaaagggg
                                                                     301
C
      <210> 297
      <211> 300
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(300)
      <223> n = A, T, C \text{ or } G
      <400> 297
                                                                      60
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aaggttttga aaaccttgaa ggagaatcat tttgacaaga agtacttaag agtctagaga
                                                                     120
                                                                     180
acaaagangt gaaccagctg aaagctctcg ggggaanctt acatgtgttg ttaggcctgt
                                                                     240
tocatcattg ggagtgcact ggccatccct caaaatttgt ctgggctggc ctgagtggtc
```

accgcacctc ggccgcgacc acgctaagcc gaattctgca gatatccatc acactggcgg	300
<210> 298 <211> 301 <212> DNA <213> Homo sapien	
<220> <221> misc_feature <222> (1)(301) <223> n = A,T,C or G	
<pre>&lt;400&gt; 298 tatggggttt gtcacccaaa agctgatgct gagaaaggcc tccctggggc ccctcccgcg ggcatctgag agacctggtg ttccagtgtt tctggaaatg ggtcccagtg ccgccggctg tgaagctctc agatcaatca cgggaagggc ctggcggtgg tggccacctg gaaccaccct gtcctgtctg tttacatttc actaycaggt tttctctggg cattacnatt tgttccccta caacagtgac ctgtgcattc tgctgtggcc tgctgtgtct gcaggtggct ctcagcgagg t</pre>	60 120 180 240 300 301
<210> 299 <211> 301 <212> DNA <213> Homo sapien	
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<210> 300 <211> 301 <212> DNA <213> Homo sapien	
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<210> 301 <211> 301 <212> DNA <213> Homo sapien	
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301
t
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      <211> 301
      <212> DNA
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tgaattttga aaattactac ttaatcctaa ttcacaataa caatggcatt aaggtttgac
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ttgagttggt tcttagtatt atttatggta aataggctct taccacttgc aaataactgg
                                                                        180
ccacatcatt aatgactgac ttcccagtaa ggctctctaa ggggtaagta ggaggatcca
                                                                        240
caggatttga gatgctaagg ccccagagat cgtttgatcc aaccctctta ttttcagagg
                                                                        300
                                                                        301
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      <211> 301
      <212> DNA
      <213> Homo sapien
      <400> 303
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atattgtttt ttgacagttt aacacatctt cttctgtcag agattctttc acaatagcac
                                                                        120
tggctaatgg aactaccgct tgcatgttaa aaatggtggt ttgtgaaatg atcataggcc
                                                                        180
                                                                        240
aqtaacqqqt atqtttttct aactgatctt ttgctcgttc caaagggacc tcaagacttc
catcgatttt atatctgggg tctagaaaag gagttaatct gttttccctc ataaattcac
                                                                        300
                                                                        301
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      <211> 301
      <212> DNA
      <213> Homo sapien
      <400> 304
                                                                         60
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tattagtttc agtttcagct tacccacttt ttgtctgcaa catgcaraas agacagtgcc
                                                                        180
ctttttagtg tatcatatca ggaatcatct cacattggtt tgtgccatta ctggtgcagt
gactttcagc cacttgggta aggtggagtt ggccatatgt ctccactgca aaattactga
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                                                                        300
                                                                        301
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      <211> 301
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1) ... (301)
      <223> n = A, T, C or G
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                                                                        120
caqqqqqaca qacctqqaca qacacqttqt catttqctqc tqtqgqtagg aaaatgggcg
taaaqqaqqa qaaacaqata caaaatctcc aactcagtat taaqgtattc tcatgcctag
                                                                        180
aatattggta qaaacaagaa tacattcata tggcaaataa ctaaccatgg tggaacaaaa
                                                                        240
                                                                        300
ttctqqqatt taaqttqqat accaanqaaa ttqtattaaa aqaqctqttc atqqaataaq
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301
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      <211> 8
      <212> PRT
      <213> Homo sapien
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Val Leu Gly Trp Val Ala Glu Leu
      <210> 307
      <211> 637
      <212> DNA
      <213> Homo sapien
      <400> 307
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                                                                        120
attgaggaat gatacttgag cccaaagagc attcaatcat tgttttattt gccttmtttt
                                                                        180
                                                                        240
cacaccattg gtgagggagg gattaccacc ctggggttat gaagatggtt gaacacccca
cacatagcac eggagatatg agateaacag tttettagce atagagatte acageecaga
                                                                        300
gcaggaggac gcttgcacac catgcaggat gacatggggg atgcgctcgg gattggtgtg
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aagaagcaag gactgttaga ggcaggcttt atagtaacaa gacggtgggg caaactctga
                                                                        420
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tttccgtggg ggaatgtcat ggtcttgctt tactaagttt tgagactggc aggtagtgaa
actcattagg ctgagaacct tgtggaatgc acttgaccca sctgatagag gaagtagcca
                                                                        540
                                                                        600
ggtgggagcc tttcccagtg ggtgtgggac atatctggca agattttgtg gcactcctgg
ttacagatac tggggcagca aataaaactg aatcttg
                                                                        637
      <210> 308
      <211> 647
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1) ... (647)
      <223> n = A, T, C or G
      <400> 308
                                                                         60
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tgctcagggg aaggttcata tgggactttc tactgcccaa ggttctatac aggatataaa
                                                                        120
                                                                        180
qqnqcctcac agtatagatc tqqtagcaaa gaagaagaaa caaacactga tctctttctg
ccacccctct gaccctttgg aactcctctg accctttaga acaagcctac ctaatatctg
                                                                        240
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ctaqaqaaaa gaccaacaac ggcctcaaag gatctcttac catgaaggtc tcagctaatt
                                                                        360
cttqqctaaq atqtqqqttc cacattaggt tctgaatatg gggggaaggg tcaatttgct
                                                                        420
cattttqtqt qtqqataaag tcaqqatgcc caggggccag agcagggggc tgcttgcttt
gggaacaatg gctgagcata taaccatagg ttatggggaa caaaacaaca tcaaagtcac
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tgtatcaatt gccatgaaga cttgagggac ctgaatctac cgattcatct taaggcagca
                                                                        540
qqaccaqttt qaqtqqcaac aatqcaqcaq cagaatcaat qqaaacaaca gaatgattgc
                                                                        600
aatqtccttt tttttctcct gcttctgact tgataaaagg ggaccgt
                                                                        647
      <210> 309
      <211> 460
      <212> DNA
      <213> Homo sapien
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aatatgattq qctqcacact tccaqactqa tgaatgatga acgtgatgga ctattgtatg
                                                                       180
qaqcacatct tcaqcaagag ggggaaatac tcatcatttt tggccagcag ttgtttgatc
accaaacatc atgccagaat actcagcaaa ccttcttagc tcttgagaag tcaaagtccg
                                                                       240
ggggaattta ttcctggcaa ttttaattgg actccttatg tgagagcagc ggctacccaq
                                                                       300
ctggggtggt ggagcgaacc cgtcactagt ggacatqcag tggcagagct cctggtaacc
                                                                       360
acctagagga atacacaggc acatgtgtga tgccaagcgt gacacctgta gcactcaaat
                                                                       420
                                                                       460
ttgtcttgtt tttgtctttc ggtgtgtaag attcttaagt
      <210> 310
      <211> 539
      <212> DNA
      <213> Homo sapien
      <400> 310
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ctaaaggttt taaaatatgt caggattgga agaaggcatg gataaagaac aaagttcagt
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taggaaagag aaacacagaa ggaagagaca caataaaagt cattatgtat tctgtgagaa
                                                                        180
                                                                        240
qtcaqacaqt aaqatttqtq qqaaatqggt tggtttgttg tatggtatgt attttagcaa
                                                                        300
taatetttat ggcagagaaa getaaaatee tttagettge gtgaatgate aettgetgaa
ttcctcaagg taggcatgat gaaggagggt ttagaggaga cacagacaca atgaactgac
                                                                        360
ctagatagaa agccttagta tactcagcta ggaatagtga ttctgagggc acactgtgac
                                                                        420
atgattatgt cattacatgt atggtagtga tggggatgat aggaaggaag aacttatggc
                                                                        480
                                                                        539
atattttcac ccccacaaaa gtcagttaaa tattgggaca ctaaccatcc aggtcaaga
      <210> 311
      <211> 526
      <212> DNA
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      <220>
      <221> misc feature
      <222> (1) ... (526)
      <223> n = A, T, C or G
      <400> 311
                                                                         60
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ttttgacqtt ttctctaaac tactaaagag gcattaatga tccataaatt atattatcta
                                                                        120
catttacagc atttaaaatg tgttcagcat gaaatattag ctacagggga agctaaataa
                                                                        180
                                                                        240
attaaacatg gaataaagat ttgtccttaa atataatcta caagaagact ttgatatttg
tttttcacaa gtgaagcatt cttataaagt gtcataacct ttttggggaa actatgggaa
                                                                        300
                                                                        360
aaaatqqqqa aactctgaaq ggttttaagt atcttacctg aagctacaga ctccataacc
                                                                        420
tctctttaca qqqaqctcct qcaqccccta cagaaatgag tgqctgagat tcttgattgc
acagcaagag cttctcatct aaaccctttc cctttttagt atctgtgtat caagtataaa
                                                                        480
agttctataa actgtagtnt acttatttta atccccaaag cacagt
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      <211> 500
      <212> DNA
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      <223> n = A, T, C or G
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tcatttctga aagcagttga gccactttat tccaaagtac actgcagatg ttcaaactct
                                                                       180
ccatttctct ttcccttcca cctgccagtt ttgctgactc tcaacttgtc atgagtgtaa
qcattaaqqa cattatgctt cttcgattct gaagacaggc cctgctcatg gatgactctg
                                                                       240
gcttcttagg aaaatatttt tcttccaaaa tcagtaggaa atctaaactt atcccctctt
                                                                       300
                                                                       360
tgcagatgtc tagcagcttc agacatttgg ttaagaaccc atgggaaaaa aaaaaatcct
                                                                       420
tgctaatgtg gtttcctttg taaaccanga ttcttatttg nctggtatag aatatcagct
                                                                       480
ctqaacqtqt qqtaaaqatt tttgtgtttg aatataggag aaatcagttt gctgaaaagt
                                                                       500
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                                                                       120
                                                                       180
ctqctqaaat qqaqataatt aacatcacta gaaacagcaa gatgacaata taatgtctaa
qtaqtqacat qtttttgcac atttccagcc cttttaaata tccacacaca caggaagcac
                                                                       240
                                                                       300
aaaaggaagc acagagatcc ctgggagaaa tgcccggccg ccatcttggg tcatcgatga
                                                                       360
qcctcqccct qtqcctqntc ccqcttgtga gggaaggaca ttagaaaatg aattgatgtg
ttccttaaag qatqqcaqqa aaacagatcc tgttgtggat atttatttga acgggattac
                                                                       420
                                                                       480
agatttgaaa tgaaqtcaca aagtgagcat taccaatgag aggaaaacag acgagaaaat
                                                                       540
cttqatqqtt cacaaqacat qcaacaaaca aaatggaata ctgtgatgac acgagcagcc
                                                                       600
aactqqqqaq qaqataccac qqqqcaqaqq tcaggattct ggccctgctg cctaactgtg
                                                                       660
cqttatacca atcatttcta tttctaccct caaacaagct gtngaatatc tgacttacgg
ticttntqqc ccacattttc atnatccacc cententttt aannttantc caaantgt
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      <211> 358
      <212> DNA
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      <400> 314
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                                                                        120
cataatcaaa tatagctgta gtacatgttt tcattggtgt agattaccac aaatgcaagg
                                                                        180
caacatgtgt agatctcttg tcttattctt ttgtctataa tactgtattg tgtagtccaa
qctctcqqta qtccaqccac tqtgaaacat gctcccttta gattaacctc gtggacgctc
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                                                                        300
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tctggggcat ttccttgtga tgcagaggac caccacacag atgacagcaa tctgaatt
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ataggtgatg atgaggacat ggaatgggcc cccaaggatg gtctgtccaa agaagcgagt
                                                                        120
                                                                        180
qacccccatt ctgaagatgt ctggaacctc taccagcagg atgatgatag ccccaatgac
```

agtcaccagc tccccgacca tagcttctgc tgtaagaggg gagggggcgg tagatgcagc	tgttgtcccg	ggggctcgtg	cggttattgg	cttcctgaag tcctgggctt	240 300 341
<210> 316 <211> 151 <212> DNA <213> Homo sapi	en				
<400> 316 agactgggca agactcttac tgtgggcctt tctcgagttt cattcaggga gctctggttg	ctgattataa	acaccactgg	cttgttgccg agcgatgtgt	tatccattta tgactggact	60 120 151
<210> 317 <211> 151 <212> DNA <213> Homo sapi	en				
<pre>&lt;400&gt; 317 agaactagtg gatcctaatg atcttcattt atctctggcc ccagggctct gttcttgcca</pre>	ttaaccctgg	ctcctgaggc			60 120 151
<210> 318 <211> 151 <212> DNA <213> Homo sapi	en				
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<210> 319 <211> 151 <212> DNA <213> Homo sapi	en				
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tagggtggca ttgtaaccag ctatggcata ggtgttaacc aaaggctgag taaacatggg
                                                                        151
tgcctctgag aaatcaaagt cttcatacac t
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      <211> 151
      <212> DNA
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      <220>
      <221> misc feature
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      <223> n = A, T, C or G
      <400> 322
                                                                         60
atccagcate ttetectgtt tettgeette ettttette ttettasatt etgettgagg
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tttqqqcttq qtcaqtttqc cacagggctt ggagatggtg acagtcttct ggcattcggc
                                                                        151
attgtgcagg gctcgcttca nacttccagt t
      <210> 323
      <211> 151
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(151)
      <223> n = A, T, C or G
      <400> 323
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                                                                         60
nagactcant tactacccag tttgtggttt twtgggagaa atgtaactgg acagttagct
                                                                        120
                                                                        151
gttcaatyaa aaagacactt ancccatgtg g
      <210> 324
      <211> 461
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(461)
      <223> n = A, T, C or G
      <400> 324
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agaagtggtc agctaaagga atccaggttg ttggttggac tgttaatacc tttgatgaaa
                                                                        120
agagttacta cgaatcccat cttggttcca gctatatcac tgacagcatg gtagaagact
                                                                        180
gcgaacctca cttctagact ttcacggtgg gacgaaacgg gttcagaaac tgccaggggc
                                                                        240
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ctcatacagg gatatcaaaa taccetttgt gctacccagg ccctggggaa tcaggtgact
                                                                        360
cacacaaatq caatagttqq tcactgcatt tttacctqaa ccaaaqctaa acccgqtgtt
gccaccatgc accatggcat gccagagttc aacactgttg ctcttgaaaa ttgggtctga
                                                                        420
                                                                        461
aaaaacgcac aagagcccct gccctgccct agctgangca c
```

```
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      <211> 400
      <212> DNA
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tttgatgtct ccaagtagtc caccttcatt taactctttg aaactgtatc atctttgcca
                                                                       120
                                                                       180
aqtaaqaqtq qtggcctatt tcagctgctt tgacaaaatg actggctcct gacttaacgt
                                                                       240
tctataaatq aatqtqctga agcaaagtgc ccatggtggc ggcgaagaag agaaagatgt
gttttgtttt ggactctctg tggtcccttc caatgctgtg ggtttccaac caggggaagg
                                                                       300
gtcccttttg cattgccaag tgccataacc atgagcacta cgctaccatg gttctgcctc
                                                                       360
                                                                       400
ctggccaagc aggctggttt gcaagaatga aatgaatgat
      <210> 326
      <211> 1215
      <212> DNA
      <213> Homo sapien
      <400> 326
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qttctqctcq qqcqtcctqq tqcatccqca qtqqqtqctg tcagccgcac actgtttcca
gaactcctac accateggge tgggeetgea cagtettgag geegaecaag ageeagggag
                                                                       180
                                                                       240
ccagatggtg gaggccagcc teteogtacg geacccagag tacaacagac cettgetege
                                                                       300
taacgacctc atgctcatca agttggacga atccgtgtcc gagtctgaca ccatccggag
catcagcatt gcttcgcagt gccctaccgc ggggaactct tgcctcgttt ctggctgggg
                                                                       360
                                                                       420
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cggagggcaa gaccagaagg actcctgcaa cggtgactct ggggggcccc tgatctgcaa
                                                                       540
cgggtacttg cagggccttg tgtctttcgg aaaagccccg tgtggccaag ttggcgtgcc
                                                                       600
                                                                       660
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ttaactctgg ggactgggaa cccatgaaat tgacccccaa atacatcctg cggaaggaat
                                                                       720
                                                                       780
tcaggaatat ctgttcccag ccctcctcc ctcaggccca ggagtccagg cccccagccc
ctcctcctc aaaccaaggg tacagatccc cagcccctcc tccctcagac ccaggagtcc
                                                                       840
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agaccccca geocetecte ceteagacce aggagtecag eccetectee etcagaccea
ggagtccaga cccccagcc cctcctcct cagacccagg ggtccaggcc cccaaccct
                                                                       960
ceteceteag acteagaggt ceaageeece aacceetect teeceagace cagaggteca
                                                                      1020
ggtcccagcc cctcctccct cagacccagc ggtccaatgc cacctagact ctccctgtac
                                                                      1080
acagtgcccc cttgtggcac gttgacccaa ccttaccagt tggtttttca tttttgtcc
                                                                      1140
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                                                                      1200
                                                                      1215
aaaaaaaaa aaaaa
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Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val
                                25
                                                     30
Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly
                            40
                                                 45
Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu
                        55
Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu Leu Ala
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gctgcagcca

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70
                                         75
Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser Asp
                                    90
Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn
                                105
            100
Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg Met Pro
                            120
                                                 125
        115
Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu Val Cys
                        135
Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys Ala Gly
                                         155
                    150
Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly Pro
                165
                                     170
Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys Ala
                                185
            180
Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu Cys Lys
                            200
Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
                        215
    210
      <210> 328
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                                                                        120
atcogcagtg ggtgctgtca gccacacact gtttccagaa ctcctacacc atcgggctgg
                                                                        180
                                                                        234
qcctqcacaq tcttqaggcc gaccaagagc cagggagcca gatggtggag gcca
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      <211> 77
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      <213> Homo sapien
      <400> 329
Leu Val Ser Gly Ser Cys Ser Gln Ile Ile Asn Gly Glu Asp Cys Ser
                 5
                                     10
                                                         15
1
Pro His Ser Gln Pro Trp Gln Ala Ala Leu Val Met Glu Asn Glu Leu
            20
                                 25
Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val Leu Ser Ala Thr
                             40
                                                 45
        35
His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly Leu His Ser Leu
                        55
    50
Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu Ala
65
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      <212> DNA
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                                                                         60
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70

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<210> 331
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      <400> 331
Gln His Asn Gly Pro Ile Pro Ser Leu Thr Pro Pro Ser Gly Ser Leu
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Val Ser Gly Ser Cys Ser
            20
      <210> 332
      <211> 2507
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tgcccttcct tctgtatatg gctgcgcccc aaatcaggaa aatgctgtcc agtggggtgt
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gtacatcaac tgttcagctt cctgggaaag tagttgtggt cacaggagct aatacaggta
                                                                       180
tcgggaagga gacagccaaa gagctggctc agagaggagc tcgagtatat ttagcttgcc
                                                                       240
gggatgtgga aaagggggaa ttggtggcca aagagatcca gaccacgaca gggaaccagc
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qcttcttagc tgaggaaaag cacctccacg ttttgatcaa caatgcagga gtgatgatgt
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gtccgtactc gaagacagca gatggctttg agatgcacat aggagtcaac cacttgggtc
                                                                       480
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cccaggaact ggcccggaga ctaaaaggct ctggcgttac gacgtattct gtacaccctg
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gcacagtcca atctgaactg gttcggcact catctttcat gagatggatg tggtggcttt
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cagaaggtct tgagattcta agtgggaatc atttcagtga ctgtcatgtg gcatgggtct
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                                                                       960
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                                                                      1200
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                                                                      1320
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                                                                      1920
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cttcttatca aaagtaatgc tgccaaagga agtctaagga attagtagtg ttcccatcac
                                                                      2160
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                                                                      2280
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aaattagaaa aattctgata atagtgcaga ataaatgaat taatgtttta cttaatttat
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agggagacta tacctggctc ttgccctaag tgagaggtct tccctcccgc accaaaaaat
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agaaaggctt tctatttcac tggcccaggt agggggaagg agagtaactt tgagtctqtq
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tataaagaat ttttttttt c
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      <211> 251
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aggagacact cccagcatgg aggagggttt atcttttcat cctaggtcag gtctacaatg
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ggggaaggtt ttattataga actcccaaca gcccacctca ctcctgccac ccacccgatg
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gccctgcctc c
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actcctggtt t
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cacctgtaaa tttgatgggg aatgtttaag aattggagac actgtgactt qcgtctgtca
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gttcaagtgc aacaatgact atgtgcctgt gtgtggctcc aatggggaga gctaccagaa
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gatctgtcca caacaaactt gccctctcat gccttgcctc tcaccatgct ctgctccagg
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tcagccccct tttggcctgt ttgttttgtc aaaaacctaa tctgcttctt gcttttcttg
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caggetgegt teegteetta egatgaagae caegatgeag tttecaaaca ttgecaetae
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      <211> 436
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gtatccaaaa gcaaaacagc agatatacaa aattaaagag acagaagata gacattaaca
                                                                       180
gataaggcaa cttatacatt gacaatccaa atccaataca tttaaacatt tgggaaatga
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gggggacaaa tggaagccar atcaaatttg tgtaaaacta ttcagtatgt ttcccttgct
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tcatgtctga raaggctctc ccttcaatgg ggatgacaaa ctccaaatgc cacacaaatg
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gggctcctaa tgtagt
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gacagcateg etgtaaaaag cetaceaatg agageteagt teaaggegaa ecaceette
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cgtaaaggat ttccgcgtcc gtgtcgcagg acagacgtat atacttccct ttcttcccca
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cacacttgca cacattctcc ctgataagca cgatggtgtg gacaggaagg aaggatttca
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Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Ser
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Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg
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Pro Gln Arg Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val
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Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val
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                               90
Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr
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          100
His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp
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Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp
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Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
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Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys
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Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala
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Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly
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Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr
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Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr
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Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
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Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys
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Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu
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Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu
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Ser Met Leu Phe Leu Val Ile Ile Met
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Lys Asn Lys Val
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His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
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Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
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Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
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Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
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Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
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Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
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Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
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Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
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Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
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                                         220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
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                                      235
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
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                                                     255
Ala Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
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725 730 His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln 740 745 Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys 760 Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser , 770 775 780 Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp 790 795 Arg Glu Val Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly 805 810 Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn 825 820 Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe 840 845 Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser 850 855 860 Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn 870 875 Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu 885 890 Glu Gly Ser Glu Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile 905 900 Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn 920 Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro 930 935 940 Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu 950 955 Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe 965 970 Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His 980 985 Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser 995 1000 1005 Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu 1015 1020 Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His 1025 1030 1035 1040 Gln Ser Gln Leu Pro Arg Thr His Met Val Val Glu Val Asp Ser Met 1045 1050 1055 Pro Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met 1060 1065 1070 Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys 1075 1080 1085 Ser Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr 1090 1095 1100 Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys 1105 1110 1115 Arg Gly Ser Gly Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp 1125 1130 Ser Ala Met Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His 1140 1145 1150 Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp 1155 1160 1165 Gly Asp Tyr Asp Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg 1170 1175 1180

Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val 1195 1190 1185 Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys 1205 1210 1215 Lys Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly 1220 1225 1230 Asn Ser Glu Val Val Lys Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn 1235 1240 1245 Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys 1250 1255 1260 Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro 1270 1275 Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr 1285 1290 Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Tyr Gly Ala Asp 1300 1305 1310 Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Gly Val 1315 1320 His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala 1335 1340 Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala 1350 1355 Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Glu Gln Asn 1365 1370 Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr 1385 Ala Val Ser Ser His His Wal Ile Cys Gln Leu Leu Ser Asp Tyr 1395 1400 1405 Lys Glu Lys Gln Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu 1410 1415 1420 Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly 1430 1435 Ser Glu Asn Ser Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn 1450 1445 Lys Asp Gly Asp Arg Glu Val Glu Glu Met Lys Lys His Glu Ser 1460 1465 1470 Asn Asn Val Gly Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly 1475 1480 1485 Asn Gly Asp Asn Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu 1490 1495 1500 Asn Gln Gln Phe Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys 1510 1515 Glu Leu Val Ser Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser 1525 1530 Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu 1540 1545 Ser Gln Arg Leu Glu Gly Ser Glu Asn Gly Gln Pro Glu Lys Arg Ser 1555 1560 1565 Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Leu Glu Asn Phe 1575 1580 Met Ala Ile Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe 1590 1595 Pro Glu Asn Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly 1605 1610 1615 Leu Ile Pro Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro 1625 1620 Asp Thr Glu Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln

1640 1635 1645 Lys Gln Phe Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile 1655 1660 Leu Ile His Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser 1670 1675 Glu Leu Ser Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn 1685 1690 Ser Thr Leu Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr 1700 1705 Met Lys His Gln Ser Gln Leu 1715 <210> 379 <211> 656 <212> PRT <213> Homo sapien <400> 379 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe 25 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp 40 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp 55 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val 70 75 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn 85 90 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser 100 105 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe 120 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His 135 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met 150 155 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala 165 170 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu 180 185 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr 200 205 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met 215 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn 230 235 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys 245 250 Ala Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly 260 265 Leu Thr Pro Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val 275 280 285 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr

295

Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile

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Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
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Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
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Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly
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Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln
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Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys
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Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile
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 Ser
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 Pro
 Ala
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 Ser
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 Val
 Lys
 Lys
 Lys
 Lys
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 Lys
 Lys
 Lys
 Trp
 Cys
 Cys
 Arg
 Cys
 Phe

 Pro
 Cys
 Cys
 Arg
 Glu
 Ser
 Gly
 Lys
 Ser
 Asn
 Val
 Gly
 Thr
 Ser
 Gly
 Asp

 His
 Asp
 Asp
 Ser
 Ala
 Met
 Lys
 Thr
 Leu
 Arg
 Ser
 Lys
 Met
 Gly
 Lys
 Trp

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Lys	Met	Gly	Lys 100	Trp	Cys	Cys	His	Cys 105	Phe	Pro	Суѕ	Cys	Arg 110	Gly	Ser
Gly	Lys	Ser 115	Lys	Val	Gly	Ala	Trp 120	Gly	Asp	Tyr	Asp	Asp 125	Ser	Ala	Phe
	Glu 130					135					140				
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	Arg			165					170					175	
	His -		180					185					190		
	Asp	195	_	-			200					205			
	Leu 210					215					220				
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	Thr			245					250					255	
	Leu Thr		260					265					270		
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	Thr		420					425					430		
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Leu	Lys	Leu		485 Ser	Glu	Glu	Glu		490 Gln	Arg	Leu	Glu		495 Ser	Glu
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 Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys
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 Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile
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<210> 383
<211> 154
<212> PRT
<213> Homo sapiens
<400> 383
Met Ala Gly Val Arg Asp Gln Gly Gln Gly Ala Arg Trp Pro His Thr
Gly Lys Arg Gly Pro Leu Leu Gln Gly Leu Thr Trp Ala Thr Gly Gly
His Cys Phe Ser Ser Glu Glu Ser Gly Ala Val Asp Gly Ala Gly Gln
Lys Lys Asp Arg Ala Trp Leu Arg Cys Pro Glu Ala Val Ala Gly Phe
     50
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Pro Leu Gly Ser Asp Cys Arg Glu Gly Gly Arg Gln Gly Cys Gly Gly

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65
                     70
                                         75
                                                              80
Ser Asp Asp Glu Asp Asp Leu Gly Val Ala Pro Gly Leu Ala Pro Ala
Trp Ala Leu Thr Gln Pro Pro Ser Gln Ser Pro Gly Pro Gln Ser Leu
Pro Ser Thr Pro Ser Ser Ile Trp Pro Gln Trp Val Ile Leu Ile Thr
                            120
Glu Leu Thr Ile Pro Ser Pro Ala His Gly Pro Pro Trp Leu Pro Asn
    130
                        135
Ala Leu Glu Arg Gly His Leu Val Arg Glu
145
                    150
<210> 384
<211> 557
<212> DNA
<213> Homo sapiens
<400> 384
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ggggaagggt cccttttqca ttqccaagtg ccataaccat gagcactact ctaccatggt 180
tetgeeteet ggeeaageag getggtttge aagaatgaaa tgaatgatte tacagetagg 240
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ctetgtagag agcagcattc ccagggacet tggaaacagt tggcactgta aggtgcttgc 360
tccccaagac acatcctaaa aggtgttgta atggtgaaaa cgtcttcctt ctttattgcc 420
ccttcttatt tatgtgaaca actgtttgtc tttttttgta tcttttttaa actgtaaagt 480
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aaaaaaaaa aaaaaaa
<210> 385
<211> 337
<212> DNA
<213> Homo sapiens
<400> 385
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gtttctctag cagcagatgg gttaggagga agtgacccaa gtggttgact cctatgtgca 120
teteaaagee atetgetgte ttegagtaeg gacacateat caeteetgea ttgttgatea 180
aaacgtggag gtgcttttcc tcagctaaga agcccttagc aaaagctcga atagacttag 240
tatcagacag gtccagtttc cgcaccaaca cctgctggtt ccctgtcgtg gtctggatct 300
ctttggccac caattccccc ttttccacat cccggca
                                                                   337
<210> 386
<211> 300
<212> DNA
<213> Homo sapiens
<400> 386
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gcccgctcgg cccagagggt gggcgcgggg ctgcctctac cggctggcgg ctgtaactca 120
gegacettgg eeegaagget etageaagga eeeacegace eeageegegg eggeggee 180
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gcggactttg cccggtgtgt ggggcggagc ggactgcgtg tccgcggacg ggcagcgaag 240
atgttagcct tegetgecag gacegtggae egateceagg getgtggtgt aaceteagee 300
<210> 387
<211> 537
<212> DNA
<213> Homo sapiens
<400> 387
qqqccqaqtc qqqcaccaaq qqactctttg caggcttcct tcctcggatc atcaaggctg 60
cccctcctg tgccatcatg atcagcacct atgagttcgg caaaagcttc ttccagaggc 120
tgaaccagga ccggcttctg ggcggctgaa agggcaagg aggcaaggac cccgtctctc 180
ccacggatgg ggagaggca ggaggagacc cagccaagtg ccttttcctc agcactgagg 240
gagggggctt gtttcccttc cctcccggcg acaagctcca gggcagggct gtccctctgg 300
gcggcccage acttectcag acacaactte tteetgetge tecagtegtg gggateatea 360
cttacccacc ccccaagttc aagaccaaat cttccagctg cccccttcgt gtttccctgt 420
gtttgctgta gctgggcatg tctccaggaa ccaagaagcc ctcagcctgg tgtagtctcc 480
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<210> 388
<211> 520
<212> DNA
<213> Homo sapiens
<400> 388
aggataattt ttaaaccaat caaatgaaaa aaacaaacaa acaaaaaagg aaatgtcatg 60
tgaggttaaa ccagtttgca ttcccctaat gtggaaaaag taagaggact actcagcact 120
qtttqaaqat tqcctcttct acagcttctg agaattgtgt tatttcactt gccaagtgaa 180
ggaccccctc cccaacatgc cccagcccac ccctaagcat ggtcccttgt caccaggcaa 240
ccaggaaact gctacttgtg gacctcacca gagaccagga gggtttggtt agctcacagg 300
acttccccca ccccagaaga ttagcatccc atactagact catactcaac tcaactaggc 360
tcatactcaa ttgatggtta ttagacaatt ccatttcttt ctggttatta taaacagaaa 420
atctttcctc ttctcattac cagtaaaggc tcttggtatc tttctgttgg aatgatttct 480
atgaacttgt cttattttaa tggtgggttt tttttctggt
<210> 389
<211> 365
<212> DNA
<213> Homo sapiens
<400> 389
cqttqcccca qtttqacaqa aqqaaaqqcq qaqcttattc aaagtctaga gggagtggag 60
gagttaaggc tggatttcag atctgcctgg ttccagccgc agtgtgccct ctgctccccc 120
aacgactttc caaataatct caccagcgcc ttccagctca ggcgtcctag aagcgtcttg 180
aagcctatgg ccagetgtct ttgtgttccc tctcacccgc ctgtcctcac agctgagact 240
cccaggaaac cttcagacta ccttcctctg ccttcagcaa ggggcgttgc ccacattctc 300
tgagggtcag tggaagaacc tagactccca ttgctagagg tagaaagggg aagggtgctg 360
gggag
<210> 390
<211> 221
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(221)
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<223> n = A, T, C \text{ or } G
<400> 390
tgcctctcca tcctggcccc gacttctctg tcaggaaagt ggggatggac cccatctgca 60
tacacggntt ctcatgggtg tggaacatct ctgcttgcgg tttcaggaag gcctctggct 120
gctctangag tctgancnga ntcgttgccc cantntgaca naaggaaagg cggagcttat 180
tcaaagtcta gagggagtgg aggagttaag gctggatttc a
<210> 391
<211> 325
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(325)
<223> n = A, T, C or G
<400> 391
tggagcaggt cccgaggcct ccctagagcc tggggccgac tctgtgncga tgcangcttt 60
ctctcgcgcc cagcctggag ctgctcctgg catctaccaa caatcagncg aggcgagcag 120
tagccagggc actgctgcca acagccagtc cnnataccat catgtnaccc ggtgngctct 180
naanttngat ntccanagec etacecaten tagttetget eteceaeegg ntaceagece 240
cactgoccag gaatoctaca gocagtacco tgtoccgacg tototaccta ccagtacgat 300
gagaceteeg getactaeta tgace
<210> 392
<211> 277
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (277)
<223> n = A, T, C or G
<400> 392
atattgttta actccttcct ttatatcttt taacattttc atggngaaag gttcacatct 60
agtctcactt nggcnagngn ctcctacttg agtctcttcc ccggcctgnn ccagtngnaa 120
antaccanga accgncatgn cttaanaacn ncctggtttn tgggttnntc aatgactgca 180
tgcagtgcac caccetgtee actaegtgat getgtaggat taaagtetea cagtgggegg 240
ctgaggatac agcgccgcgt cctgtgttgc tggggaa
<210> 393
<211> 566
<212> DNA
<213> Homo sapiens
<400> 393
actagtccag tgtggtggaa ttcgcggccg cgtcgacgga caggtcagct gtctggctca 60
gtgatctaca ttctgaagtt gtctgaaaat gtcttcatga ttaaattcag cctaaacgtt 120
ttgccgggaa cactgcagag acaatgctgt gagtttccaa ccttagccca tctgcgggca 180
gagaaggtet agtttgteea teageattat catgatatea ggaetggtta ettggttaag 240
gaggggtcta ggagatctgt cccttttaga gacaccttac ttataatgaa gtatttggga 300
gggtggtttt caaaagtaga aatgtcctgt attccgatga tcatcctgta aacattttat 360
catttattaa tcatccctgc ctgtgtctat tattatattc atatctctac gctggaaact 420
ttctgcctca atgtttactg tgcctttgtt tttgctagtt tgtgttgttg aaaaaaaaa 480
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cattetetge etgagtttta atttttgtee aaagttattt taatetatae aattaaaage 540
ttttgcctat caaaaaaaaa aaaaaa
<210> 394
<211> 384
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (384)
<223> n = A, T, C or G
<400> 394
gaacatacat gtcccggcac ctgagctgca gtctgacatc atcgccatca cgggcctcgc 60
tgcaaattng gaccgggcca aggctggact gctggagcgt gtgaaggagc tacaggccna 120
gcaggaggac cgggctttaa ggagttttaa gctgagtgtc actgtagacc ccaaatacca 180
tcccaagatt atcgggagaa agggggcagt aattacccaa atccggttgg agcatgacgt 240
gaacatccag tttcctgata aggacgatgg gaaccagccc caggaccaaa ttaccatcac 300
agggtacgaa aagaacacag aagctgccag ggatgctata ctgagaattg tgggtgaact 360
                                                                   384
tgagcagatg gtttctgagg acgt
<210> 395
<211> 399
<212> DNA
<213> Homo sapiens
<400> 395
ggcaaaactg tgtgacctca ataagacctc gcagatccaa ggtcaagtat cagaagtgac 60
tctgaccttg gactccaaga cctacatcaa cagcctggct atattagatg atgagccagt 120
tatcaqaqqt ttcatcattg cggaaattgt ggagtctaag gaaatcatgg cctctgaagt 180
attcacqtct ttccagtacc ctgagttctc tatagagttg cctaacacag gcagaattgg 240
ccagctactt gtctgcaatt gtatcttcaa gaataccctg gccatccctt tgactgacgt 300
caagttetet ttggaaagee tgggeatete eteactacag acetetgace atgggaeggt 360
gcagcctggt gagaccatcc aatcccaaat aaaatgcac
<210> 396
<211> 403
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(403)
<223> n = A, T, C or G
<400> 396
tggagttntc agtgcaaaca agccataaag cttcagtagc aaattactgt ctcacagaaa 60
gacattttca acttctgctc cagctgctga taaaacaaat catgtgttta gcttgactcc 120
agacaaggac aacctgttcc ttcataactc tctagagaaa aaaaggagtt gttagtagat 180
actaaaaaaa gtggatgaat aatctggata tttttcctaa aaagattcct tgaaacacat 240
taggaaaatg gagggcctta tgatcagaat gctagaatta gtccattgtg ctgaagcagg 300
gtttagggga gggagtgagg gataaaagaa ggaaaaaaag aagagtgaga aaacctattt 360
atcaaagcag gtgctatcac tcaatgttag gccctgctct ttt
<210> 397
<211> 100
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<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(100)
<223> n = A, T, C or G
<400> 397
actagtncag tgtggtggaa ttcgcggccg cgtcgaccta naanccatct ctatagcaaa 60
tccatccccg ctcctggttg gtnacagaat gactgacaaa
<210> 398
<211> 278
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(278)
<223> n = A, T, C or G
<400> 398
qcqqccqcqt cqacagcagt tccgccagcg ctcgcccctg ggtggggatg tgctgcacgc 60
ccacctggac atctggaagt cagcggcctg gatgaaagag cggacttcac ctggggcgat 120
tcactactgt gcctcgacca gtgaggagag ctggaccgac agcgaggtgg actcatcatg 180
ctccgggcag cccatccacc tgtggcagtt cctcaaggag ttgctactca agccccacag 240
ctatggccgc ttcattangt ggctcaacaa ggagaagg
<210> 399
<211> 298
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(298)
<223> n = A, T, C \text{ or } G
<400> 399
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ggggtgccng catggagcgc atgggcgcgg gcctgggcca cggcatggat cgcgtgggct 120
ccgagatcga gcgcatgggc ctggtcatgg accgcatggg ctccgtggag cgcatgggct 180
ccggcattga gcgcatgggc ccgctgggcc tcgaccacat ggcctccanc attgancgca 240
tgggccagac catggagcgc attggctctg gcgtggagcn catgggtgcc ggcatggg
<210> 400
<211> 548
<212> DNA
<213> Homo sapiens
<400> 400
acatcaacta cttcctcatt ttaaggtatg gcagttccct tcatcccctt ttcctgcctt 60
gtacatgtac atgtatgaaa tttccttctc ttaccgaact ctctccacac atcacaaggt 120
caaagaacca cacgettaga agggtaagag ggcaccetat gaaatgaaat ggtgatttet 180
tgaqtctctt ttttccacqt ttaaggggcc atggcaggac ttagagttgc gagttaagac 240
tgcaqaqqqc taqaqaatta tttcatacag gctttgaggc cacccatgtc acttatcccg 300
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tataccetet caccatecee ttgtetacte tgatgeecee aagatgeaac tgggeageta 360
qttqqcccca taattctqqq cctttqttqt ttqttttaat tacttqgqca tcccaggaag 420
ctticcagtg atctectace atgggeeece etectgggat caageeecte ecaggeeetg 480
tececaquee etectquee aquecacuq ettquettqq tqutcaquee teccattqqq 540
agcaggtt
<210> 401
<211> 355
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(355)
<223> n = A,T,C or G
<400> 401
actattcca tattatatt ctacacatta ctacctcagt actactgaa acttagett 60
tgatgtctcc aagtagtcca ccttcattta actctttgaa actgtatcat ctttgccaag 120
taaqaqtqqt qqcctatttc agctqctttq acaaaatqac tgqctcctqa cttaacqttc 180
tataaatqaa tqtqctqaaq caaaqtqccc atggtggcgg cgaaqaagan aaagatgtgt 240
tttgttttgg actctctgtg gtcccttcca atgctgnggg tttccaacca ggggaagggt 300
cccttttgca ttgccaagtg ccataaccat gagcactact ctaccatggn tctgc
<210> 402
<211> 407
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(407)
<223> n = A, T, C or G
<400> 402
atgqqqcaaq ctqqataaaq aaccaagacc cactggagta tgctgtcttc aagaaaccca 60
tctcacatgc ggtggcatac ataggctcaa aataaaggaa tggagaaaaa tatttcaagc 120
aaatggaaaa cagaaaaaag caggtgttgc actcctactt tctgacaaaa cagactatgc 180
gaataaagat aaaaaagaga aggacattac aaaggtggtc ctgacctttg ataaatctca 240
ttqcttqata ccaacctqqq ctqttttaat tqcccaaacc aaaaggataa tttqctgagg 300
ttqtqqaqct tctcccctqc aqaqaqtccc tqatctccca aaatttggtt gagatgtaag 360
qntqattttq ctqacaactc cttttctqaa gttttactca tttccaa
<210> 403
<211> 303
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(303)
<223> n = A, T, C or G
<400> 403
cagtatttat agccnaactg aaaagctagt agcaggcaag tctcaaatcc aggcaccaaa 60
tcctaagcaa gagccatggc atggtgaaaa tgcaaaagga gagtctggcc aatctacaaa 120
tagagaacaa gacctactca gtcatgaaca aaaaggcaga caccaacatg gatctcatgg 180
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qqqattqqat attqtaatta taqaqcaqqa aqatqacaqt gatcqtcatt tggcacaaca 240
tcttaacaac gaccgaaacc cattatttac ataaacctcc attcggtaac catgttgaaa 300
gga
<210> 404
<211> 225
<212> DNA
<213> Homo sapiens
<400> 404
aagtgtaact tttaaaaatt tagtggattt tgaaaattct tagaggaaag taaaggaaaa 60
attgttaatg cactcattta cctttacatg gtgaaagttc tctcttgatc ctacaaacag 120
acattttcca ctcgtgtttc catagttgtt aagtgtatca gatgtgttgg gcatgtgaat 180
ctccaagtgc ctgtgtaata aataaagtat ctttatttca ttcat
<210> 405
<211> 334
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (334)
<223> n = A, T, C or G
<400> 405
gagctgttat actgtgagtt ctactaggaa atcatcaaat ctgagggttg tctggaggac 60
ttcaatacac ctcccccat agtgaatcag cttccagggg gtccagtccc tctccttact 120
tcatccccat cccatgccaa aggaagaccc tccctccttg gctcacagcc ttctctaggc 180
ttcccagtgc ctccaggaca gagtgggtta tgttttcagc tccatccttg ctgtgagtgt 240
ctggtgcggt tgtgcctcca gcttctgctc agtgcttcat ggacagtgtc cagcccatgt 300
cactetecae teteteanng tggateceae eect
<210> 406
<211> 216
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(216)
<223> n = A, T, C or G
<400> 406
tttcatacct aatgagggag ttganatnac atnnaaccag gaaatgcatg gatctcaang 60
gaaacaaaca cccaataaac tcggagtggc agactgacaa ctgtgagaca tgcacttgct 120
acnaaacaca aatttnatgt tgcacccttg tttctacacc tgtgggttat gacaaagaca 180
actgccaaag aatnttcaag aaggaggact gccant
<210> 407
<211> 413
<212> DNA
<213> Homo sapiens
<400> 407
gctgacttgc tagtatcatc tgcattcatt gaagcacaag aacttcatgc cttgactcat 60
gtaaatgcaa taggattaaa aaataaattt gatatcacat ggaaacagac aaaaaatatt 120
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gtacaacatt gcacccagtg tcagattcta cacctggcca ctcaggaagc aagagttaat 180
cccagaggtc tatgtcctaa tgtgttatgg caaatggatg tcatgcacgt accttcattt 240
ggaaaattgt catttgtcca tgtgacagtt gatacttatt cacatttcat atgggcaacc 300
tgccagacag gagaaagtct tcccatgtta aaagacattt attatcttgt tttcctgtca 360
tgggagttcc agaaaaagtt aaaacagaca atgggccagg ttctgtagta aag
<210> 408
<211> 183
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (183)
<223> n = A, T, C or G
<400> 408
ggagctngcc ctcaattcct ccatntctat gttancatat ttaatgtctt ttgnnattaa 60
tncttaacta gttaatcctt aaagggctan ntaatcctta actagtccct ccattgtgag 120
cattatectt ccagtatten cettetnttt tatttactee tteetggeta eccatgtact 180
                                                                   183
ntt
<210> 409
<211> 250
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(250)
<223> n = A, T, C or G
<400> 409
cccacgcatg ataagctctt tatttctgta agtcctgcta ggaaatcatc aaatctgacg 60
gtggtttggg ggacctgaac aaacctcctg taattaatca gctttcagtt tctcccccta 120
gtccctcctt caacaacata ggaggatcct ccccttcttt ctgctcacgg ccttatctag 180
gcttcccagt gcccccagga cagcgtgggc tatgtttaca gcgcntcctt gctggggggg 240
ggccntatgc
<210> 410
<211> 306
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (306)
<223> n = A, T, C or G
<400> 410
qqctqqtttq caaqaatqaa atqaatqatt ctacaqctaq gacttaacct tgaaatggaa 60
agtettgeaa teccatttge aggateegte tgtgeacatg cetetgtaga gageageatt 120
cccagggacc ttggaaacag ttggcactgt aaggtgcttg ctccccaaga cacatcctaa 180
aaggtgttgt aatggtgaaa accgcttcct tctttattgc cccttcttat ttatgtgaac 240
nactggttgg ctttttttgn atctttttta aactggaaag ttcaattgng aaaatgaata 300
tcntgc
```

```
<210> 411
<211> 261
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(261)
<223> n = A, T, C or G
<400> 411
agagatattn cttaggtnaa agttcataga gttcccatga actatatgac tggccacaca 60
ggatcttttg tatttaagga ttctgagatt ttgcttgagc aggattagat aaggctgttc 120
tttaaatgtc tgaaatggaa cagatttcaa aaaaaaaccc cacaatctag ggtgggaaca 180
aggaaggaaa gatgtgaata ggctgatggg caaaaaacca atttacccat cagttccagc 240
cttctctcaa ggngaggcaa a
<210> 412
<211> 241
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(241)
<223> n = A, T, C or G
<400> 412
gttcaatgtt acctgacatt tctacaacac cccactcacc gatgtattcg ttgcccagtg 60
ggaacatacc agcctgaatt tggaaaaaat aattgtgttt cttgcccagg aaatactacg 120
actgactttg atggctccac aaacataacc cagtgtaaaa acagaagatg tggagggag 180
ctgggagatt tcactgggta cattgaattc ccaaactacc cangcaatta cccagccaac 240
                                                                    241
<210> 413
<211> 231
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (231)
<223> n = A, T, C or G
<400> 413
aactettaca atecaagtga eteatetgtg tgettgaate etttecaetg teteatetee 60
ctcatccaag tttctagtac cttctctttg ttgtgaagga taatcaaact gaacaacaaa 120
aagtttactc tecteatttg gaacetaaaa actetettet teetgggtet gagggeteea 180
agaatccttq aatcanttct cagatcattq gggacaccan atcaggaacc t
<210> 414
<211> 234
<212> DNA
<213> Homo sapiens
<400> 414
actqtccatq aaqcactgag cagaagctgg aggcacaacg caccagacac tcacagcaag 60
```

```
the street made when the street with the street when the street when the street when the street when the street
```

```
gatggagetg aaaacataac ceaetetgte etggaggeac tgggaageet agagaagget 120
gtgagccaag gagggagggt cttcctttgg catgggatgg ggatgaagta aggagaggga 180
ctggaccccc tggaagctga ttcactatgg ggggaggtgt attgaagtcc tcca
<210> 415
<211> 217
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (217)
<223> n = A, T, C or G
<400> 415
gcataggatt aagactgagt atcttttcta cattctttta actttctaag gggcacttct 60
caaaacacag accaggtagc aaatctccac tgctctaagg ntctcaccac cactttctca 120
cacctagcaa tagtagaatt cagtcctact tctgaggcca gaagaatggt tcagaaaaat 180
                                                                    217
antggattat aaaaaataac aattaagaaa aataatc
<210> 416
<211> 213
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (213)
<223> n = A, T, C or G
<400> 416
atgcatatnt aaagganact gcctcgcttt tagaagacat ctggnctgct ctctgcatga 60
ggcacagcag taaagctctt tgattcccag aatcaagaac tctccccttc agactattac 120
cgaatgcaag gtggttaatt gaaggccact aattgatgct caaatagaag gatattgact 180
                                                                    213
atattggaac agatggagtc tctactacaa aag
<210> 417
<211> 303
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(303)
<223> n = A, T, C or G
<400> 417
nagtcttcag gcccatcagg gaagttcaca ctggagagaa gtcatacata tgtactgtat 60
gtgggaaagg ctttactctg agttcaaatc ttcaagccca tcagagagtc cacactggag 120
agaagccata caaatgcaat gagtgtggga agagcttcag gagggattcc cattatcaag 180
ttcatctagt ggtccacaca ggagagaaac cctataaatg tgagatatgt gggaagggct 240
tcantcaaag ttcgtatctt caaatccatc ngaaggncca cagtatanan aaacctttta 300
                                                                    303
agt
<210> 418
<211> 328
<212> DNA
```

```
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(328)
<223> n = A, T, C or G
<400> 418
tttttggcgg tggtgggca gggacgggac angagtctca ctctgttgcc caggctggag 60
tgcacaggca tgatctcggc tcactacaac ccctgcctcc catgtccaag cgattcttgt 120
gcctcagcct tccctgtagc tagaattaca ggcacatgcc accacaccca gctagttttt 180
gtatttttag tagagacagg gtttcaccat gttggccagg ctggtctcaa actcctnacc 240
tcagnggtca ggctggtctc aaactcctga cctcaagtga tctgcccacc tcagcctccc 300
aaaqtqctan qattacaqqc cgtgagcc
<210> 419
<211> 389
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (389)
<223> n = A, T, C or G
<400> 419
cctcctcaag acggcctgtg gtccgcctcc cggcaaccaa gaagcctgca gtgccatatg 60
acccctgage catggactgg agectgaaag geagegtaca ceetgeteet gatettgetg 120
cttgtttcct ctctgtggct ccattcatag cacagttgtt gcactgaggc ttgtgcaggc 180
cgagcaaggc caagctggct caaagagcaa ccagtcaact ctgccacggt gtgccaggca 240
coggttetec agecaceae eteactoget ecogeaaatg geacateagt tettetacee 300
taaaqqtagg accaaagggc atctgctttt ctgaagtcct ctgctctatc agccatcacg 360
                                                                   389
tggcagccac tcnggctgtg tcgacgcgg
<210> 420
<211> 408
<212> DNA
<213> Homo sapiens
<400> 420
gttcctccta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
tggccagggc agcaagcctt agccttggct tcttgtttct gcttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga cacctttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attcttgaat gagtcctata aacatgaaca ggtttatatt cgaagcacag 360
                                                                   408
acgttgaccg gactttgatg aagtgctatg acaaacctgg caagcccg
<210> 421
<211> 352
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(352)
<223> n = A, T, C or G
```

```
<400> 421
qctcaaaaat ctttttactg atnggcatgg ctacacaatc attgactatt acggaggcca 60
gaggagaatg aggcctggcc tgggagccct gtgcctacta naagcacatt agattatcca 120
ttcactgaca gaacaggtct tttttgggtc cttcttctcc accacnatat acttgcagtc 180
ctccttcttg aagattcttt ggcagttgtc tttgtcataa cccacaggtg tagaaacaag 240
qqtqcaacat qaaatttctg tttcgtagca agtgcatgtc tcacaagttg gcangtctgc 300
cactccgagt ttattgggtg tttgtttcct ttgagatcca tgcatttcct gg
<210> 422
<211> 337
<212> DNA
<213> Homo sapiens
<400> 422
atgccaccat gctggcaatg cagcgggcgg tcgaaggcct gcatatccag cccaagctgg 60
cgatgatcga cggcaaccgt tgcccgaagt tgccgatgcc agccgaagcg gtggtcaagg 120
gcgatagcaa ggtgccggcg atcgcggcgg cgtcaatcct ggccaaggtc agccgtgatc 180
gtgaaatggc agctgtcgaa ttgatctacc cgggttatgg catcggcggg cataagggct 240
atccgacacc ggtgcacctg gaagccttgc agcggctggg gccgacgccg attcaccgac 300
                                                                   337
gcttcttccg ccggtacggc tggcctatga aaattat
<210> 423
<211> 310
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(310)
<223> n = A, T, C or G
<400> 423
gctcaaaaat ctttttactg atatggcatg gctacacaat cattgactat tagaggccag 60
aggagaatga ggcctggcct gggagccctg tgcctactan aagcncatta gattatccat 120
tcactgacag aacaggtett ttttgggtee ttetteteea ecaegatata ettgeagtee 180
teettettga agattetttg geagttgtet ttgteataac ceacaggtgt anaaacaagg 240
gtgcaacatg aaatttctgt ttcgtagcaa gtgcatgtct cacagttgtc aagtctgccc 300
tccgagttta
                                                                   310
<210> 424
<211> 370
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (370)
<223> n = A, T, C or G
<400> 424
gctcaaaaat ctttttactg ataggcatgg ctacacaatc attgactatt agaggccaga 60
ggagaatgag gcctggcctg ggagccctgt gcctactaga agcacattag attatccatt 120
cactgacaga acaggtettt tttgggteet tetteteeae cacgatatae ttgeagteet 180
ccttcttgaa gattctttgg cagttgtctt tgtcataacc cacaggtgta gaaacatcct 240
ggttgaatct cctggaactc cctcattagg tatgaaatag catgatgcat tgcataaagt 300
cacgaaggtg gcaaagatca caacgctgcc cagganaaca ttcattgtga taagcaggac 360
```

```
370
tccgtcgacg
<210> 425
<211> 216
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (216)
<223> n = A, T, C or G
<400> 425
taacaacnca acatcaaggn aaananaaca ggaatggntg actntgcata aatnggccga 120
anattatcca ttatnttaag ggttgacttc aggntacagc acacagacaa acatgcccag 180
                                                                216
gaggntntca ggaccgctcg atgtnttntg aggagg
<210> 426
<211> 596
<212> DNA
<213> Homo sapiens
<400> 426
cttccagtga ggataaccct gttgccccgg gccgaggttc tccattaggc tctgattgat 60
tggcagtcag tgatggaagg gtgttctgat cattccgact gccccaaggg tcgctggcca 120
gctctctgtt ttgctgagtt ggcagtagga cctaatttgt taattaagag tagatggtga 180
gctgtccttg tattttgatt aacctaatgg ccttcccagc acgactcgga ttcagctgga 240
gacatcacgg caacttttaa tgaaatgatt tgaagggcca ttaagaggca cttcccqtta 300
ttaggcagtt catctgcact gataacttct tggcagctga gctggtcgga gctgtggccc 360
aaacgcacac ttggcttttg gttttgagat acaactctta atcttttagt catgcttgag 420
ggtggatggc cttttcagct ttaacccaat ttgcactgcc ttggaagtgt agccaggaga 480
atacactcat atactcgtgg gcttagaggc cacagcagat gtcattggtc tactgcctga 540
gtcccgctgg tcccatccca ggaccttcca tcggcgagta cctgggagcc cgtgct
<210> 427
<211> 107
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(107)
<223> n = A, T, C or G
<400> 427
qaaqaattca agttaggttt attcaaaggg cttacngaga atcctanacc caggncccag 60
                                                                107
cccgggagca gccttanaga gctcctgttt gactgcccgg ctcagng
<210> 428
<211> 38
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(38)
```

```
<223> n = A, T, C or G
<400> 428
                                                                   38
gaacttccna anaangactt tattcactat tttacatt
<210> 429
<211> 544
<212> DNA
<213> Homo sapiens
<400> 429
ctttgctgga cggaataaaa gtggacgcaa gcatgacctc ctgatgaggg cgctgcattt 60
attgaaqaqc qqctqcaqcc ctgcggttca gattaaaatc cgagaattgt atagacgccg 120
atatccacga actcttgaag gactttctga tttatccaca atcaaatcat cggttttcag 180
tttggatggt ggctcatcac ctgtagaacc tgacttggcc gtggctggaa tccactcgtt 240
gccttccact tcagttacac ctcactcacc atcctctcct gttggttctg tgctgcttca 300
agatactaag cccacatttg agatgcagca gccatctccc ccaattcctc ctgtccatcc 360
tgatgtgcag ttaaaaaatc tgccctttta tgatgtcctt gatgttctca tcaagcccac 420
gagtttagtt caaagcagta ttcagcgatt tcaagagaag ttttttattt ttgctttgac 480
acctcaacaa gttagagaga tatgcatatc cagggatttt ttgccaggtg gtaggagaga 540
                                                                   544
ttat
<210> 430
<211> 507
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(507)
<223> n = A, T, C or G
<400> 430
cttatcncaa tggggctccc aaacttggct gtgcagtgga aactccgggg gaattttgaa 60
gaacactgac acceatette cacecegaca etetgattta attgggetge agtgagaaca 120
gagcatcaat ttaaaaagct gcccagaatg ttntcctggg cagcgttgtg atctttgccn 180
ccttcgtgac tttatgcaat gcatcatgct atttcatacc taatgaggga gttccaggag 240
attcaaccag gatgtttcta cncctgtggg ttatgacaaa gacaactgcc aaagaatntt 300
caaqaaqqaq qactqcaaqt atatcqtqqt qqaqaaqaaq qacccaaaaa agacctgttc 360
tgtcagtgaa tggataatct aatgtgcttc tagtaggcac agggctccca ggccaggcct 420
cattetecte tggcetetaa tagteaatga ttgtgtagee atgcetatea gtaaaaagat 480
ttttgagcaa aaaaaaaaa aaaaaaa
<210> 431
<211> 392
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(392)
<223> n = A, T, C \text{ or } G
<400> 431
gaaaattcag aatggataaa aacaaatgaa gtacaaaata tttcagattt acatagcgat 60
aaacaagaaa gcacttatca ggaggactta caaatggaag tacactctan aaccatcatc 120
tatcatggct aaatgtgaga ttagcacagc tgtattattt gtacattgca aacacctaga 180
```

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aaqaqatqqq aaacaaaatc ccaggagttt tgtgtgtgga gtcctgggtt ttccaacaga 240
catcattcca qcattctqaq attaqqqnqa ttqqqqqatca ttctqqaqtt qgaatqttca 300
acaaaagtga tgttgttagg taaaatgtac aacttctgga tctatgcaga cattgaaggt 360
gcaatgagtc tggcttttac tctgctgttt ct
<210> 432
<211> 387
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(387)
<223> n = A, T, C or G
<400> 432
ggtatccnta cataatcaaa tatagctgta gtacatgttt tcattggngt agattaccac 60
aaatgcaagg caacatgtgt agatetettg tettattett ttgtetataa taetgtattg 120
ngtagtccaa gctctcggna gtccagccac tgngaaacat gctcccttta gattaacctc 180
gtggacnetn ttgttgnatt gtetgaactg tagngeeetg tattttgett etgtetgnga 240
attetqttqc ttctqqqqca tttccttqnq atgcaqagga ccaccacaca gatgacagca 300
atctqaattq ntccaatcac agctgcgatt aagacatact gaaatcgtac aggaccggga 360
                                                                   387
acaacgtata gaacactgga gtccttt
<210> 433
<211> 281
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(281)
<223> n = A, T, C or G
<400> 433
ttcaactagc anagaanact gcttcagggn gtgtaaaatg aaaggcttcc acgcagttat 60
ctgattaaag aacactaaga gagggacaag gctagaagcc gcaggatgtc tacactatag 120
caqqenetat ttqqqttqqe tqqaqqaqet qtqqaaaaca tgqagagatt ggegetggag 180
ategeogtgg ctattecten ttgntattae accagngagg ntetetgtnt geceaetggt 240
tnnaaaaccg ntatacaata atgatagaat aggacacaca t
<210> 434
<211> 484
<212> DNA
<213> Homo sapiens
<400> 434
ttttaaaata agcatttagt gctcagtccc tactgagtac tctttctctc ccctcctctg 60
aatttaattc tttcaacttg caatttgcaa ggattacaca tttcactgtg atgtatattg 120
tgttgcaaaa aaaaaaaagt gtctttgttt aaaattactt ggtttgtgaa tccatcttgc 180
tttttcccca ttggaactag tcattaaccc atctctgaac tggtagaaaa acatctgaag 240
agctagtcta tcagcatctg acaggtgaat tggatggttc tcagaaccat ttcacccaga 300
cagoctgttt ctatcctgtt taataaatta gtttgggttc tctacatgca taacaaaccc 360
tgctccaatc tgtcacataa aagtctgtga cttgaagttt agtcagcacc cccaccaaac 420
tttatttttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataaag tacccatgtc 480
ttta
```

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<210> 435
<211> 424
<212> DNA
<213> Homo sapiens
<400> 435
gegeegetea gageaggtea etttetgeet tecaegteet eetteaagga ageeeeatgt 60
gggtagcttt caatatcgca ggttcttact cctctgcctc tataagctca aacccaccaa 120
cgatcgggca agtaaacccc ctccctcgcc gacttcggaa ctggcgagag ttcagcgcag 180
atgggcctgt ggggagggg caagatagat gagggggagc ggcatggtgc ggggtgaccc 240
cttggagaga ggaaaaaggc cacaagaggg gctgccaccg ccactaacgg agatggccct 300
ggtagagacc tttgggggtc tggaacctct ggactcccca tgctctaact cccacactct 360
gctatcagaa acttaaactt gaggattttc tctgtttttc actcgcaata aattcagagc 420
aaac
<210> 436
<211> 667
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (667)
<223> n = A, T, C or G
<400> 436
accttgggaa nactctcaca atataaaggg tcgtagactt tactccaaat tccaaaaagg 60
tectggeeat gtaateetga aagtttteee aaggtageta taaaateett ataagggtge 120
agcetettet ggaatteete tgattteaaa gteteaetet eaagttettg aaaacgaggg 180
caqttcctga aaggcaggta tagcaactga tcttcagaaa gaggaactgt gtgcaccggg 240
atgqqctqcc aqaqtagqat aggattccaq atgctgacac cttctqqqqq aaacagqqct 300
gccaggtttg tcatagcact catcaaagtc cggtcaacgt ctgtgcttcg aatataaacc 360
tgttcatgtt tataggactc attcaagaat tttctatatc tctttcttat atactctcca 420
aqttcataat gctgctccat gcccagctgg gtgagttggc caaatccttg tggccatgag 480
gatteettta tggggteagt gggaaaggtg teaatgggae tteggtetee atgeegaaac 540
accaaagtca caaacttcaa ctccttggct agtacacttc ggtctagcca gaaaaaaagc 600
agaaacaaga agccaaggct aaggcttgct gccctgccag gaggaggggt gcagctctca 660
tgttgag
<210> 437
<211> 693
<212> DNA
<213> Homo sapiens
<400> 437
ctacgtctca accetcattt ttaggtaagg aatettaagt ccaaagatat taagtgacte 60
acacagccag gtaaggaaag ctggattggc acactaggac tctaccatac cgggttttgt 120
taaagctcag gttaggaggc tgataagctt ggaaggaact tcagacagct ttttcagatc 180
ataaaagata attottagco catgttotto tocagagcag acotgaaatg acagcacago 240
aggtactect ctattttcae ecetettget tetaetetet ggeagteaga eetgtgggag 300
gccatgggag aaagcagctc tctggatgtt tgtacagatc atggactatt ctctgtggac 360
cattleteca ggttacecta ggtgteacta ttggggggae agecageate tttagettte 420
atttgagttt ctgtctgtct tcagtagagg aaacttttgc tcttcacact tcacatctga 480
acacctaact gctgttgctc ctgaggtggt gaaagacaga tatagagctt acagtattta 540
tcctatttct aggcactgag ggctgtgggg taccttgtgg tgccaaaaca gatcctgttt 600
taaggacatg ttgcttcaga gatgtctgta actatctggg ggctctgttg gctctttacc 660
                                                                   693
ctgcatcatg tgctctcttg gctgaaaatg acc
```

```
<210> 438
<211> 360
<212> DNA
<213> Homo sapiens
<400> 438
ctgcttatca caatgaatgt tctcctgggc agcgttgtga tctttgccac cttcgtgact 60
ttatgcaatg catcatgcta tttcatacct aatgagggag ttccaggaga ttcaaccagg 120
atgtttctac acctgtgggt tatgacaaag acaactgcca aagaatcttc aagaaggagg 180
actgcaagta tatctggtgg agaagaagga cccaaaaaaag acctgttctg tcagtgaatg 240
gataatctaa tgtgcttcta gtaggcacag ggctcccagg ccaggcctca ttctcctctg 300
gcctctaata gtcaataatt gtgtagccat gcctatcagt aaaaagattt ttgagcaaac 360
<210> 439
<211> 431
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(431)
<223> n = A, T, C or G
<400> 439
gttcctnnta actcctgcca gaaacagctc tcctcaacat gagaqctqca cccctcctcc 60
tggccagggc agcaagcett agcettgget tettgtttet getttttte tggctagace 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga cacctttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
qccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attettgaat gagteetata aacatgaaca ggtttatatt egaagcacag 360
acqttqaccq gactttgatg agtgctatga caaacctggc agcccgtcga cgcggccgcg 420
                                                                   431
aatttagtag t
<210> 440
<211> 523
<212> DNA
<213> Homo sapiens
<400> 440
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tttaaatgtc tgaaatggaa cagatttcaa aaaaaaaccc cacaatctag ggtgggaaca 180
aggaaggaaa gatgtgaata ggctgatggg caaaaaacca atttacccat cagttccagc 240
cttctctcaa ggagaggcaa agaaaggaga tacagtggag acatctggaa agttttctcc 300
actggaaaac tgctactatc tgtttttata tttctgttaa aatatatgag gctacagaac 360
taaaaattaa aacctctttg tgtcccttgg tcctggaaca tttatgttcc ttttaaagaa 420
acaaaaatca aactttacag aaagatttga tgtatgtaat acatatagca gctcttgaag 480
tatatatatc atagcaaata agtcatctga tgagaacaag cta
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<210> 441
<211> 430
<212> DNA
<213> Homo sapiens
<400> 441
gttcctccta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
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gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga cacctttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attcttgaat gagtcctata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg agtgctatga caaacctggc agcccgtcga cgcggccgcg 420
aatttagtag
<210> 442
<211> 362
<212> DNA
<213> Homo sapiens
<400> 442
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tttcctqqaa tqacaattat attttaactt tggtggggga aagagttata ggaccacagt 120
cttcacttct gatacttgta aattaatctt ttattgcact tgttttgacc attaagctat 180
atgtttagaa atggtcattt tacggaaaaa ttagaaaaat tctgataata gtgcagaata 240
aatgaattaa tgttttactt aatttatatt gaactgtcaa tgacaaataa aaattctttt 300
tgattatttt ttgttttcat ttaccagaat aaaaactaag aattaaaagt ttgattacag 360
                                                                   362
tc
<210> 443
<211> 624
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(624)
<223> n = A, T, C or G
<400> 443
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ttgaaagaat taaattcaga ggagggaga gaaagagtac tcagtaggga ctgagcacta 120
aatgcttatt ttaaaagaaa tgtaaagagc agaaagcaat tcaggctacc ctgccttttg 180
tgctggctag tactccggtc ggtgtcagca gcacgtggca ttgaacattg caatgtggag 240
cccaaaccac agaaaatggg gtgaaattgg ccaactttct attaacttgg cttcctgttt 300
tataaaatat tqtqaataat atcacctact tcaaagggca gttatgaggc ttaaatgaac 360
taacgcctac aaaacactta aacatagata acataggtgc aagtactatg tatctggtac 420
atggtaaaca tccttattat taaagtcaac gctaaaatga atgtgtgtgc atatgctaat 480
agtacagaga gagggcactt aaaccaacta agggcctgga gggaaggttt cctggaaaga 540
ngatgcttgt gctgggtcca aatcttggtc tactatgacc ttggccaaat tatttaaact 600
                                                                   624
ttqtccctat ctqctaaaca gatc
<210> 444
<211> 425
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(425)
<223> n = A, T, C or G
<400> 444
qcacatcatt nntcttgcat tctttgagaa taagaagatc agtaaatagt tcagaagtgg 60
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gaagetttgt ccaggeetgt gtgtgaacee aatgttttge ttagaaatag aacaagtaag 120
ttcattgcta tagcataaca caaaatttgc ataagtggtg gtcagcaaat ccttgaatgc 180
tgcttaatgt gagaggttgg taaaatcctt tgtgcaacac tctaactccc tgaatgtttt 240
gctgtgctgg gacctgtgca tgccagacaa ggccaagctg gctgaaagag caaccagcca 300
cctctgcaat ctgccacctc ctgctggcag gatttgtttt tgcatcctgt gaagagccaa 360
ggaggcacca gggcataagt gagtagactt atggtcgacg cggccgcgaa tttagtagta 420
gtaga
<210> 445
<211> 414
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(414)
<223> n = A, T, C or G
<400> 445
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ttctqttttt caaaaqcaqa qatggccaga gtctcaacaa actgtatctt caagtctttg 120
tgaaattett tgeatgtgge agattattgg atgtagttte etttaactag catataaate 180
tggtgtgttt cagataaatg aacagcaaaa tgtggtggaa ttaccatttg gaacattgtg 240
aatgaaaaat tgtgtctcta gattatgtaa caaataacta tttcctaacc attgatcttt 300
qqatttttat aatcctactc acaaatgact aggcttctcc tcttgtattt tgaagcagtg 360
tgggtgctgg attgataaaa aaaaaaaaag tcgacgcggc cgcgaattta gtag
<210> 446
<211> 631
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(631)
<223> n = A, T, C or G
<400> 446
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tctgcatgca tgggaagtgt gagcattcta tcaatatgca ggagccatct tgcaggtgtg 120
atgctggtta tactggacaa cactgtgaaa aaaaggacta cagtgttcta tacgttgttc 180
ccggtcctgt acgatttcag tatgtcttaa tcgcagctgt gattggaaca attcagattg 240
ctgtcatctg tgtggtggtc ctctgcatca caagggccaa actttaggta atagcattgg 300
actgagattt gtaaactttc caaccttcca ggaaatgccc cagaagcaac agaattcaca 360
gacagaagca aaatacaggg cactacagtt cagacaatac aacaagagcg tccacgaggt 420
taatctaaag ggagcatgtt tcacagtggc tggactaccg agagcttgga ctacacaata 480
cagtattata gacaaaagaa taagacaaga gatctacaca tgttgccttg catttgtggt 540
aatctacacc aatgaaaaca tgtactacag ctatatttga ttatgtatgg atatatttga 600
                                                                   631
aatagtatac attgtcttga tgttttttct g
<210> 447
<211> 585
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
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<222> (1)...(585)
<223> n = A, T, C \text{ or } G
<400> 447
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cctggccatg taatcctgaa agttttccca aggtagctat aaaatcctta taagggtgca 120
gcctcttctg gaattcctct gatttcaaag tctcactctc aagttcttga aaacgagggc 180
agttcctgaa aggcaggtat agcaactgat cttcagaaag aggaactgtg tgcaccggga 240
tgggctgcca gagtaggata ggattccaga tgctgacacc ttctggggga aacagggctg 300
ccaggtttgt catagcactc atcaaagtcc ggtcaacgtc tgtgcttcga atataaacct 360
gttcatgttt ataggactca ttcaagaatt ttctatatct ctttcttata tactctccaa 420
qttcataatq ctqctccatq cccaqctggg tgagttggcc aaatccttgt ggccatgagg 480
attectttat ggggteagtg ggaaaggtgt caatgggaet teggteteea tgeegaaaca 540
ccaaagtcac aaacttcaac tccttggcta gtacacttcg gtcta
<210> 448
<211> 93
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) ... (93)
<223> n = A, T, C or G
<400> 448
tgctcgtggg tcattctgan nnccgaactg accntgccag ccctgccgan gggccnccat 60
ggctccctag tgccctggag agganggggc tag
<210> 449
<211> 706
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(706)
<223> n = A, T, C \text{ or } G
<400> 449
ccaagttcat gctntgtgct ggacgctgga cagggggcaa aagcnnttgc tcgtgggtca 60
ttctgancac cgaactgacc atgccagccc tgccgatggt cctccatggc tccctagtgc 120
cctggagagg aggtgtctag tcagagagta gtcctggaag gtggcctctg ngaggagcca 180
cggggacage atectgeaga tggtegggeg egteceatte gecatteagg etgegeaact 240
gttgggaagg gcgatcggtg cgggcctctt cgctattacg ccagctggcg aaagggggat 300
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cgacggccag tgaattgaat ttaggtgacn ctatagaaga gctatgacgt cgcatgcacg 420
cgtacgtaag cttggatcct ctagagcggc cgcctactac tactaaattc gcggccgcgt 480
cgacgtggga tccncactga gagagtggag agtgacatgt gctggacnct gtccatgaag 540
cactgagcag aagctggagg cacaacgcnc cagacactca cagctactca ggaggctgag 600
aacaggttga acctgggagg tggaggttgc aatgagctga gatcaggccn ctgcncccca 660
                                                                    706
gcatggatga caqagtgaaa ctccatctta aaaaaaaaa aaaaaa
<210> 450
<211> 493
<212> DNA
<213> Homo sapiens
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<400> 450
gagacggagt gtcactctgt tgcccaggct ggagtgcagc aagacactgt ctaagaaaaa 60
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aaatgaggct gagaacttta caaagggatc ttacagacat gtcgccaata tcactgcatg 180
agcctaagta taagaacaac ctttggggag aaaccatcat ttgacagtga ggtacaattc 240
caagtcaggt agtgaaatgg gtggaattaa actcaaatta atcctgccag ctgaaacgca 300
agagacactg tcagagagtt aaaaagtgag ttctatccat gaggtgattc cacagtcttc 360
tcaagtcaac acatctgtga actcacagac caagttctta aaccactgtt caaactctgc 420
tacacatcag aatcacctgg agagctttac aaactcccat tgccgagggt cgacgcggcc 480
gcgaatttag tag
<210> 451
<211> 501
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(501)
<223> n = A, T, C or G
<400> 451
gggcgcgtcc cattcgccat tcaggctgcg caactgttgg gaagggcgat cggtgcgggc 60
ctcttcgcta ttacgccagc tggcgaaagg gggatgtgct gcaaggcgat taagttgggt 120
aacgccaggg ttttcccagt cncgacgttg taaaacgacg gccagtgaat tgaatttagg 180
tgacnctata gaagagctat gacgtcgcat gcacgcgtac gtaagcttgg atcctctaga 240
geggeegect actactacta aattegegge egegtegaeg tgggateene actgagagag 300
tggagagtga catgtgctgg acnctqtcca tgaagcactg agcagaagct ggaggcacaa 360
cgcnccagac actcacagct actcaggagg ctgagaacag gttgaacctg ggaggtggag 420
gttgcaatga gctgagatca ggccnctgcn ccccagcatg gatgacagag tgaaactcca 480
                                                                    501
tcttaaaaaa aaaaaaaaaa a
<210> 452
<211> 51
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(51)
<223> n = A, T, C \text{ or } G
<400> 452
                                                                    51
agacqqtttc accnttacaa cnccttttag gatgggnntt ggggagcaag c
<210> 453
<211> 317
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(317)
<223> n = A, T, C \text{ or } G
<400> 453
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acatctgaag agctagtcta tcagcatctg gcaagtgaat tggatggttc tcagaaccat 120
ttcacccana cagcctgttt ctatcctgtt taataaatta gtttgggttc tctacatgca 180
taacaaaccc tgctccaatc tgtcacataa aagtctgtga cttgaagttt antcagcacc 240
cccaccaaac tttattttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataagg 300
tacccatgtc tttatta
<210> 454
<211> 231
<212> DNA
<213> Homo sapiens
<400> 454
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taaqccacqc cacqctcttq aaggagtctt gaattctcct ctgctcactc agtagaacca 120
agaaqaccaa attettetge atcccagett gcaaacaaaa ttgttettet aggtetecae 180
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<210> 455
<211> 231
<212> DNA
<213> Homo sapiens
<400> 455
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qtttcaacqc attgatgact tctccaaqga tcttcctttg gcatcgacca cattcagggg 180
caaaqaattt ctcataqcac aqctcacaat acagggctcc tttctcctct a
<210> 456
<211> 231
<212> DNA
<213> Homo sapiens
<400> 456
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tgcactcaaa ttcctttatc aggaataact acatagccac tatttacaaa gccattggaa 180
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<210> 457
<211> 231
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(231)
<223> n = A, T, C or G
<400> 457
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gcattcctta atatgatctt gctataatta gatttttctc cattagagtt catacagttt 120
tatttgattt tattagcaat ctctttcaga agacccttga gatcattaag ctttgtatcc 180
                                                                   231
agttgtctaa atcgatgcct catttcctct gaggtgtcgc tggcttttgt g
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<211> 231
<212> DNA
<213> Homo sapiens
<400> 458
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acaccctaac cttgggtaac agcatttgga attatcattt gggatgagta gaatttccaa 180
qqtcctqqqt taqqcatttt qqqqqqccag accccaggag aagaagattc t
<210> 459
<211> 231
<212> DNA
<213> Homo sapiens
<400> 459
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ccttcqcqaa acctgtggtg gcccaccagt cctaacggga caggacagag agacagagca 120
geoctgoact gttttecete caccacagee atectgtece teattggete tgtgetttee 180
actatacaca gtcaccgtcc caatgagaaa caagaaggag caccctccac a
<210> 460
<211> 231
<212> DNA
<213> Homo sapiens
<400> 460
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cctatcaccc tattcttggg ggctgcttct tcacagtgat catgaagcct agcagcaaat 120
cccacctccc cacacgcaca cggccagcct ggagcccaca gaagggtcct cctgcaqcca 180
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<210> 461
<211> 231
<212> DNA
<213> Homo sapiens
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gcgtgtgctc cagaagagtg tgtgcatgcc agaggggaaa caggcgcctg tgtgtcctgg 120
qtqqqqttca qtqaqqaqtq qqaaattqqt tcaqcaqaac caaqccqttq qqtqaataaq 180
agggggattc catggcactg atagagccct atagtttcag agctgggaat t
<210> 462
<211> 231
<212> DNA
<213> Homo sapiens
<400> 462
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gggtcatgca agtataaaaa ttaaaaaaaa aagacttcat gcccaatctc atatgatgtg 120
gaagaactgt tagagagacc aacagggtag tgggttagag atttccagag tcttacattt 180
                                                                   231
tctagaggag gtatttaatt tcttctcact catccagtgt tgtatttagg a
<210> 463
<211> 231
<212> DNA
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<213> Homo	sapiens					
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<210> 464 <211> 231 <212> DNA <213> Homo	sapiens					
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<210> 466 <211> 231 <212> DNA <213> Homo	sapiens					
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## <213> Homo sapiens

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Ala Leu Ala Glu Val Thr Gly Cys Ser Leu Gly Pro Leu Gly Leu Ala 100 105 110

Gln His Ala Gln Ala Ser Val Leu Leu Cys Tyr Lys Trp Ser His

120 125 115 Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr Ala Ala Phe 135 Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu Trp Ala Ser Trp Leu Ser Arg Gly Arg Pro 165 <210> 482 <211> 143 <212> PRT <213> Homo sapiens <400> 482 Met Glu Pro Tyr Arg Gly Asn Lys Lys Gln Val Gln Glu Lys Gly Val Pro Cys Leu Trp Gly Ser Ser Pro Cys Leu Arg Cys His Met Ala Leu Arg Ala Ser Trp Leu Pro Gly Gly Gly Pro Gln Ala Ile Leu Gly Arg Thr Leu Cys Ser Ser Ala Glu Ser Ser Gln Asp Cys His Pro Gly Gly 50 Pro Ser Ile Ala Leu Ala Lys Pro Cys Arg Gly Val Trp Leu Leu Phe Glu Pro Ala Trp Pro Pro Trp His Ala Arg Ala Pro Gly Ala Gly Thr Leu Leu Arg Val Cys Leu Ser Cys Leu Gly Cys His Leu Cys Gly Gly 105 Ala Ser Gly Gly Gly Pro Ala Thr Asn Leu Thr Gln Ser Arg Lys Trp Met Ala Met Phe Pro Gln Pro Glu Trp Leu Pro Pro Asp Gly 135 <210> 483 <211> 143 <212> PRT <213> Homo sapiens <400> 483 Met Glu Thr Gln Arg Gly Asn Lys Gln Arg Ala Gln Glu Gln Gly Val Cys Cys Leu Trp Gly Ser Ser Pro Cys Leu Gly Ser Tyr Gly Thr Ala

<211> 36

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Gly Phe Leu Val Ala Lys Arg Arg Thr Thr Gly Leu Leu Glu Glu Asp
Phe Thr Phe Lys Cys Arg Lys Gln Pro Lys Leu Pro Ser Met Arg Leu
Ser Leu Leu Trp Pro Trp Arg Asp Leu Lys Phe Val Pro Arg Gln Asp
Lys Leu Thr Arg Ser Ser Val Ser Val Ala Gly Ala Tyr Ala Cys Arg
Ala Gly Pro Gly Trp Leu Lys Glu Gln Pro Ala Thr Ser Ala Arg Val
Arg Leu Val Gln Ala Glu His Pro Pro Pro His Pro Leu Glu Glu Val
Gly Met Ala Arg Phe Pro Gln Pro Glu Cys Leu Pro Pro Tyr Cys
                        135
    130
       <210> 484
       <211> 30
       <212> PRT
       <213> Homo Sapien
       <400> 484
 Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gln Gly Phe
 Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
       <210> 485
       <211> 31
       <212> DNA
       <213> Artificial Sequence
       <220>
       <223> Made in a lab
       <400> 485
                                                                         31
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       <211> 27
       <212> DNA
       <213> Artificial Sequence
       <220>
       <223> Made in a lab
       <400> 486
                                                                         27
 gcgaattctc acgctgagta tttggcc
       <210> 487
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<212> DNA
     <213> Artificial Sequence
      <220>
      <223> Made in a lab
     <400> 487
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      <210> 488
      <211> 33
      <212> DNA
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 488
                                                                        33
gggaagette tteecegget geaceagetg tge
     <210> 489
      <211> 19
      <212> PRT
      <213> Artificial Sequence
     <220>
      <223> Made in a lab
     <400> 489
Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
1
Ser Val Ala
      <210> 490
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 490
Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala Thr Cys
Leu Ser His Ser
            20
      <210> 491
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <223> Made in a lab
      <400> 491
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Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu
                                    10
Thr Gly Phe Thr
      <210> 492
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 492
Ala Leu Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr
                                    10
1
Leu Ala Ser Leu
      <210> 493
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
     <400> 493
Tyr Thr Leu Ala Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro
1
Lys Tyr Arg Gly
      <210> 494
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 494
Leu Pro Lys Tyr Arg Gly Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser
                                    10
Leu Met Ile Ser
      <210> 495
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 495
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Asp Ser Leu Met Thr Ser Phe Leu Pro Gly Pro Lys Pro Gly Ala Pro
                                    10
1
Phe Pro Asn Gly
      <210> 496
      <211> 21
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 496
Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
1
Pro Pro Pro Pro Ala
            20
      <210> 497
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
     <400> 497
Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val
1
Ser Val Arg Val
            20
      <210> 498
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 498
Asp Val Ser Val Arg Val Val Gly Glu Pro Thr Glu Ala Arg Val
                                    10
1
Val Pro Gly Arg
            20
      <210> 499
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 499
Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
```

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15
                                     10
Ser Ala Phe Leu
            20
      <210> 500
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 500
Leu Asp Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met
                                     10
Gly Ser Ile Val
            20
      <210> 501
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 501
Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met
                 5
                                                          15
1
Val Ser Ala Ala
            20
      <210> 502
      <211> 414
      <212> DNA
      <213> Homo Sapien
      <220>
      <221> misc feature
      <222> (1) ... (414)
      <223> n = A, T, C \text{ or } G
      <400> 502
caccatggag acaggcctgc gctggctttt cctggtcgct gtgctcaaag gtgtccaatg
                                                                          60
tcagtcggtg gaggagtccg ggggtcgcct ggtcacgcct gggacacctt tgacantcac
                                                                         120
ctgtagagtt tttggaatng acctcagtag caatgcaatg agctgggtcc gccaggctcc
                                                                         180
agggaagggg ctggaatgga tcggagccat tgataattgt ccacantacg cgacctgggc
                                                                         240
                                                                         300
qaaaqqccqa ttnatnattt ccaaaacctn gaccacggtg gatttgaaaa tgaccagtcc
gacaaccgag gacacggcca cctatttttg tggcagaatg aatactggta atagtggttg
                                                                         360
                                                                         414
gaagaatatt tggggcccag gcaccctggt caccgtntcc tcagggcaac ctaa
      <210> 503
      <211> 379
      <212> DNA
      <213> Homo Sapien
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<220>
      <221> misc feature
      <222> (1)...(379)
      <223> n = A, T, C \text{ or } G
      <400> 503
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                                                                        120
ctggtcacgc ctgggacacc cctgacactc acctgcaccg tntctggatt ngacatcagt
agctatqqaq tgagctgggt ccgccaggct ccagggaagg ggctggnata catcggatca
                                                                        180
                                                                        240
ttaqtaqtaq tggtacattt tacgcgagct gggcgaaagg ccgattcacc atttccaaaa
                                                                        300
cctngaccac ggtggatttg aaaatcacca gtttgacaac cgaggacacg gccacctatt
tntgtgccag agggggttt aattataaag acatttgggg cccaggcacc ctggtcaccg
                                                                        360
                                                                        379
tntccttagg gcaacctaa
      <210> 504
      <211> 19
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 504
Gly Phe Thr Asn Tyr Thr Asp Phe Glu Asp Ser Pro Tyr Phe Lys Glu
                                                          15
1
Asn Ser Ala
      <210> 505
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 505
Lys Glu Asn Ser Ala Phe Pro Pro Phe Cys Cys Asn Asp Asn Val Thr
                                     10
                                                          15
1
Asn Thr Ala Asn
            20
      <210> 506
      <211> 407
      <212> DNA
      <213> Homo Sapien
      <400> 506
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                                                                         60
                                                                         120
tcgctggagg agtccggggg tcgcctggtc acgcctggga cacccctgac actcacctgc
                                                                         180
acceptetete gatteteect cagtageaat geaatgatet gggteegeea ggeteeaggg
                                                                         240
aaqqqqctqq aatacatcqq atacattagt tatggtggta gcgcatacta cgcgagctgg
                                                                         300
qtqaaaqqcc qattcaccat ctccaaaacc tcqaccacgg tggatctgag aatgaccagt
                                                                         360
ctgacaaccg aggacacggc cacctatttc tgtgccagaa atagtgattt tagtggtatg
                                                                         407
ttgtggggcc caggcaccct ggtcaccgtc tcctcagggc aacctaa
```

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<210> 507
      <211> 422
      <212> DNA
      <213> Homo Sapien
      <400> 507
atggagacag gcctgcgctg gcttctcctg gtcgctgtgc tcaaaggtgt ccagtgtcag
                                                                         60
tcggtggagg agtccggggg tcgcctggtc acgcctggga cacccctgac actcacctgt
                                                                        120
acagtetetg gatteteett eageaactae gacetgaact gggteegeea ggeteeaggg
                                                                        180
aaggggctgg aatggatcgg gatcattaat tatgttggta ggacggacta cgcgaactgg
                                                                        240
                                                                        300
gcaaaaggcc ggttcaccat ctccaaaacc tcgaccaccg tggatctcaa gatcgccagt
ccgacaaccg aggacacggc cacctatttc tgtgccagag ggtggaagtg cgatgagtct
                                                                        360
                                                                        420
ggtccgtgct tgcgcatctg gggcccaggc accctggtca ccgtctcctt agggcaacct
                                                                        422
aa
      <210> 508
      <211> 411
      <212> DNA
      <213> Homo Sapien
      <220>
      <221> misc_feature
      <222> (1) ... (411)
      <223> n = A, T, C or G
      <400> 508
atggagacag gcctcgctgg cttctcctgg tcgctgtgct caaaggtgtc cagtgtcagt
                                                                         60
cggtggagga gtccgggggt cgcctggtca cgcctgggac acccctgaca ctcacctgca
                                                                        120
                                                                        180
cagtctctgg aatcgacctc agtagctact gcatgagctg ggtccgccag gctccaggga
aggggctgga atggatcgga atcattggta ctcctggtga cacatactac gcgaggtggg
                                                                        240
                                                                        300
cgaaaggccg attcaccatc tccaaaacct cgaccacggt gcatntgaaa atcnccagtc
                                                                        360
cgacaaccga ggacacggcc acctatttct gtgccagaga tcttcgggat ggtagtagta
                                                                        411
ctggttatta taaaatctgg ggcccaggca ccctggtcac cgtctccttg g
       <210> 509
       <211> 15
       <212> PRT
       <213> Artificial Sequence
       <220>
       <223> Made in a lab
       <400> 509
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
                                     10
       <210> 510
       <211> 15
       <212> PRT
       <213> Artificial Sequence
       <220>
       <223> Made in a lab
       <400> 510
 Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile
```

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The streng s
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15
                                    10
                 5
1
     <210> 511
     <211> 15
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 511
Tyr His Pro Ser Met Phe Cys Ala Gly Gly Gln Asp Gln Lys
      <210> 512
      <211> 15
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
     <400> 512
Asp Ser Gly Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu
      <210> 513
      <211> 15
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 513
Ala Pro Cys Gly Gln Val Gly Val Pro Asx Val Tyr Thr Asn Leu
                                     10
      <210> 514
      <211> 15
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 514
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
                                     10
      <210> 515
      <211> 15
      <212> PRT
      <213> Artificial Sequence
      <220>
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<223> Made in a lab
      <400> 515
Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg
      <210> 516
      <211> 15
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 516
Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln
      <210> 517
      <211> 15
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
     <400> 517
Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met
      <210> 518
      <211> 15
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 518
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly
      <210> 519
      <211> 17
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 519
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg Asn Tyr Asp Glu Gly Cys
Gly
```

<210> 520

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<211> 25
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 520
Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr
                                    10
Glu Ala Arg Arg His Tyr Asp Glu Gly
            20
      <210> 521
      <211> 21
      <212> PRT
      <213> Artificial Sequence
      <223> Made in a lab
      <400> 521
Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
1
Pro Pro Pro Ala
            20
      <210> 522
      <211> 20
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <400> 522
Leu Leu Val Val Pro Ala Ile Lys Lys Asp Tyr Gly Ser Gln Glu Asp
                                    10
Phe Thr Gln Val
      <210> 523
      <211> 254
      <212> PRT
      <213> Artificial Sequence
      <220>
      <223> Made in a lab
      <220>
      <221> VARIANT
      <222> (1)...(254)
      <223> Xaa = Any amino acid
      <400> 523
Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
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<212> PRT

<213> Homo sapien

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10
                  5
Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
                                 25
Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
                             40
Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
                         55
                                             60
Trp Val Leu Ser Ala Thr His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
                     70
                                         75
Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
                                     90
Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
                                                     110
             100
                                 105
Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
                                                  125
                             120
         115
Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
                                             140
                         135
    130
Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
                                         155
                     150
Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
                                     170
                                                          175
                 165
Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
                                 185
             180
Ala Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser Gly
                                                  205
                             200
         195
 Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
                         215
                                             220
     210
 Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
                                                              240
                     230
                                         235
 Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
                                      250
<210> 524
<211> 765
<212> DNA
<213> Homo sapien
<400> 524
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                                                                       120
ggatcgctcg tctctggtag ctgcagccaa atcataaacg gcgaggactg cagcccgcac
                                                                       180
tcgcagccct ggcaggcgc actggtcatg gaaaacgaat tgttctgctc gggcgtcctg
                                                                       240
gtgcatccgc agtgggtgct gtcagccgca cactgtttcc agaactccta caccatcggg
                                                                        300
ctqqqcctqc acaqtcttqa qqccqaccaa gagccaggga gccagatggt ggaggccagc
                                                                        360
ctctccgtac ggcacccaga gtacaacaga cccttgctcg ctaacgacct catgctcatc
                                                                        420
aagttggacg aatccgtgtc cgagtctgac accatccgga gcatcagcat tgcttcgcag
                                                                        480
tgccctaccg cggggaactc ttgcctcgtt tctggctggg gtctgctggc gaacggcaga
atgcctaccg tgctgcagtg cgtgaacgtg tcggtggtgt ctgaggaggt ctgcagtaag
                                                                        540
                                                                        600
ctctatgacc cgctgtacca ccccagcatg ttctgcgccg gcggagggca agaccagaag
gactectgea aeggtgacte tggggggeee etgatetgea aegggtaett geagggeett
                                                                        660
                                                                        720
gtgtctttcg gaaaagcccc gtgtggccaa gttggcgtgc caggtgtcta caccaacctc
                                                                        765
tgcaaattca ctgagtggat agagaaaacc gtccaggcca gttaa
<210> 525
<211> 254
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<400> 525
Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
                                    10
Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
                                25
Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
                            40
Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
                        55
Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
                    70
                                        7.5
Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
                85
                                    90
Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
                                105
                                                    110
            100
Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
                            120
                                                125
        115
Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
                        135
                                             140
Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
                    150
                                        155
Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
                                    170
                                                         175
Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
                                185
                                                     190
Ala Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly
                            200
                                                 205
Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
                        215
                                             220
Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
                    230
                                        235
Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
                245
                                     250
<210> 526
<211> 963
<212> DNA
<213> Homo sapiens
<400> 526
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aactgcatcg tggtcttcat cgtaaggacg gaacgcagcc tgcacgctcc gatgtacctc 180
tttctctgca tgcttgcagc cattgacctg gccttatcca catccaccat gcctaagatc 240
cttgcccttt tctggtttga ttcccgagag attagctttg aggcctgtct tacccagatg 300
ttctttattc atgccctctc agccattgaa tccaccatcc tgctggccat ggcctttgac 360
cgttatgtgg ccatctgcca cccactgcgc catgctgcag tgctcaacaa tacagtaaca 420
gcccagattg gcatcgtggc tgtggtccgc ggatccctct tttttttccc actgcctctg 480
ctgatcaagc ggctggcctt ctgccactcc aatgtcctct cgcactccta ttgtgtccac 540
caggatgtaa tgaagttggc ctatgcagac actttgccca atgtggtata tggtcttact 600
gccattctgc tggtcatggg cgtggacgta atgttcatct ccttgtccta ttttctgata 660
atacgaacgg ttctgcaact gccttccaag tcagagcggg ccaaggcctt tggaacctgt 720
gtgtcacaca ttggtgtggt actcgccttc tatgtgccac ttattggcct ctcagttgta 780
caccgctttg gaaacagcct tcatcccatt gtgcgtgttg tcatgggtga catctacctg 840
ctgctgcctc ctgtcatcaa tcccatcatc tatggtgcca aaaccaaaca gatcagaaca 900
```

cgggtgctgg ctatgttcaa gatcagctgt gacaaggact tgcaggctgt gggaggcaag 960

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<210> 527 <211> 320 <212> PRT <213> Homo sapiens

<400> 527

Met Ser Ser Cys Asn Phe Thr His Ala Thr Phe Val Leu Ile Gly Ile
5 10 15

Pro Gly Leu Glu Lys Ala His Phe Trp Val Gly Phe Pro Leu Leu Ser 20 25 30

Met Tyr Val Val Ala Met Phe Gly Asn Cys Ile Val Val Phe Ile Val 35 40 45

Arg Thr Glu Arg Ser Leu His Ala Pro Met Tyr Leu Phe Leu Cys Met 50 55 60

Leu Ala Ala Ile Asp Leu Ala Leu Ser Thr Ser Thr Met Pro Lys Ile 65 70 75 80

Leu Ala Leu Phe Trp Phe Asp Ser Arg Glu Ile Ser Phe Glu Ala Cys 85 90 95

Leu Thr Gln Met Phe Phe Ile His Ala Leu Ser Ala Ile Glu Ser Thr  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro 115 120 125

Leu Arg His Ala Ala Val Leu Asn Asn Thr Val Thr Ala Gln Ile Gly 130 135 140

Ile Val Ala Val Val Arg Gly Ser Leu Phe Phe Phe Pro Leu Pro Leu 145 150 155 160

Leu Ile Lys Arg Leu Ala Phe Cys His Ser Asn Val Leu Ser His Ser 165 170 175

Tyr Cys Val His Gln Asp Val Met Lys Leu Ala Tyr Ala Asp Thr Leu 180 185 190

Pro Asn Val Val Tyr Gly Leu Thr Ala Ile Leu Leu Val Met Gly Val 195 200 205

Asp Val Met Phe Ile Ser Leu Ser Tyr Phe Leu Ile Ile Arg Thr Val 210 215 220

Leu Gln Leu Pro Ser Lys Ser Glu Arg Ala Lys Ala Phe Gly Thr Cys 225 230 235 240

Val Ser His Ile Gly Val Val Leu Ala Phe Tyr Val Pro Leu Ile Gly 245 250 255

Leu Ser Val Val His Arg Phe Gly Asn Ser Leu His Pro Ile Val Arg

```
270
                                265
            260
Val Val Met Gly Asp Ile Tyr Leu Leu Leu Pro Pro Val Ile Asn Pro
Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Thr Arg Val Leu Ala
Met Phe Lys Ile Ser Cys Asp Lys Asp Leu Gln Ala Val Gly Gly Lys
                                        315
                    310
       <210> 528
       <211> 20
       <212> DNA
       <213> Homo Sapien
       <400> 528
                                                                         20
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Pro Glu Asp Arg Ser Gln His Leu Gly Glu Glu Leu Gln Gly Phe Trp 50 55 60

Asp Lys Glu Val Leu Arg Ala Glu Asn Asp Ala Gln Lys Pro Ser Leu 65 70 75 80

Thr Arg Ala Ile Ile Lys Cys Tyr Trp Lys Ser Tyr Leu Val Leu Gly 85 90 95

Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val Ile Gln Pro Ile Phe 100 105 110

Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr Asp Pro Met Asp Ser 115 120 125

Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr Val Leu Thr Phe Cys 130 135 140

Thr Leu Ile Leu Ala Ile Leu His His Leu Tyr Phe Tyr His Val Gln 155 150 155

Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys His Met Ile Tyr Arg 165 170 175

Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly Lys Thr Thr Gly
180 185 190

Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn Lys Phe Asp Gln Val 195 200 205

Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro Leu Gln Ala Ile Ala 210 215 220

Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile Ser Cys Leu Ala Gly 225 230 235 240

Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln Ser Cys Phe Gly Lys 245 250 255

Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr Phe Thr Asp Ala Arg 260 265 270

Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile Arg Ile Ile Lys Met 275 280 285

Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile Thr Asn Leu Arg Lys 295 Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys Leu Arg Gly Met Asn 310 315 Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile Val Phe Val Thr Phe Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr Ala Ser Arg Val Phe 345 Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu Thr Val Thr Leu Phe Phe Pro Ser Ala Ile Glu Arg Val Ser Glu Ala Ile Val Ser Ile Arg Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg 395 Gln Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser Phe Thr Val Arg Pro Gly Glu Leu Leu Ala Val Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu Gly Glu Leu Ala Pro Ser His Gly Leu Val Ser Val His Gly Arg Ile Ala Tyr Val Ser Gln 475 Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala 505 Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn 535 Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu Leu 570 Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val Thr His

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- Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser Leu Gln Gly Leu Trp 900 905 910
- Thr Ile Arg Ala Tyr Lys Ala Glu Glu Arg Cys Gln Glu Leu Phe Asp 915 920 925
- Ala His Gln Asp Leu His Ser Glu Ala Trp Phe Leu Phe Leu Thr Thr 930 935 940
- Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile Cys Ala Met Phe Val 945 950 955 960
- Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala Lys Thr Leu Asp Ala 965 970 975
- Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu Thr Leu Met Gly Met 980 985 990
- Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val Glu Asn Met Met Ile 995  $1000\,$   $1005\,$
- Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu Glu Lys Glu Ala Pro 1010 1015 1020
- Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp Pro His Glu Gly Val 1025 1030 1035 1040
- Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser Pro Gly Gly Pro Leu 1045 1050 1055
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- Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser Leu Ile Ser Ala Leu 1075 1080 1085
- Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp Ile Asp Lys Ile Leu 1090 1095 1100
- Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys Lys Met Ser Ile Ile 1105 1110 1115
- Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met Arg Lys Asn Leu Asp 1125 1130 1135
- Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp Asn Ala Leu Gln Glu 1140 1145 1150
- Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro Gly Lys Met Asp Thr 1155 1160 1165
- Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val Gly Gln Arg Gln Leu 1170 1175 1180
- Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn Gln Ile Leu Ile Ile 1185 1190 1195 1200

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Gln Lys Pro Ser Leu Thr Arg Ala Ile Ile Lys Cys Tyr Trp Lys Ser 35 40 45

Tyr Leu Val Leu Gly Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val 50 55 60

Ile Gln Pro Ile Phe Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr 65 70 75 80

Asp Pro Met Asp Ser Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr 85 90 95

Val Leu Thr Phe Cys Thr Leu Ile Leu Ala Ile Leu His His Leu Tyr
100 105 110

Phe Tyr His Val Gln Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys 115 120 125

His Met Ile Tyr Arg Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly 130 135 140

Lys Thr Thr Thr Gly Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn 145 150 155 160

Lys Phe Asp Gln Val Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro 165 170 175

Leu Gln Ala Ile Ala Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile 180 185 190

Ser Cys Leu Ala Gly Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln 195 200 205

Ser Cys Phe Gly Lys Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr 210 215 220

Phe Thr Asp Ala Arg Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile 225 230 235 240

Arg Ile Ile Lys Met Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile Thr Asn Leu Arg Lys Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys 265 Leu Arg Gly Met Asn Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile 280 Val Phe Val Thr Phe Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr 295 Ala Ser Arg Val Phe Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu Thr Val Thr Leu Phe Phe Pro Ser Ala Ile Glu Arg Val Ser Glu Ala 330 Ile Val Ser Ile Arg Arg Ile Gln Thr Phe Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg Gln Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr 370 Leu Gln Gly Leu Ser Phe Thr Val Arg Pro Gly Glu Leu Leu Ala Val 395 Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu 410 Gly Glu Leu Ala Pro Ser His Gly Leu Val Ser Val His Gly Arg Ile 425 Ala Tyr Val Ser Gln Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly 475 Asp Leu Thr Val Ile Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln 490 Lys Ala Arq Val Asn Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile 500 Tyr Leu Leu Asp Asp Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg 520 His Leu Phe Glu Leu Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr

535

Ile Leu Val Thr His Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile 550 Leu Ile Leu Lys Asp Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu 570 Phe Leu Lys Ser Gly Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn 585 Glu Glu Ser Glu Gln Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn 600 605 Arg Thr Phe Ser Glu Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro 610 Ser Leu Lys Asp Gly Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro 635 Val Thr Leu Ser Glu Glu Asn Arg Ser Glu Gly Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr Phe Arg Ala Gly Ala His Trp Ile Val Phe Ile 665 Phe Leu Ile Leu Leu Asn Thr Ala Ala Gln Val Ala Tyr Val Leu Gln Asp Trp Trp Leu Ser Tyr Trp Ala Asn Lys Gln Ser Met Leu Asn Val 695 Thr Val Asn Gly Gly Gly Asn Val Thr Glu Lys Leu Asp Leu Asn Trp Tyr Leu Gly Ile Tyr Ser Gly Leu Thr Val Ala Thr Val Leu Phe Gly 730 Ile Ala Arg Ser Leu Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln Thr Leu His Asn Lys Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu 760 Phe Phe Asp Arg Asn Pro Ile Gly Arg Ile Leu Asn Arg Phe Ser Lys Asp Ile Gly His Leu Asp Asp Leu Leu Pro Leu Thr Phe Leu Asp Phe 790 795 Ile Gln Thr Leu Leu Gln Val Val Gly Val Val Ser Val Ala Val Ala 810 Val Ile Pro Trp Ile Ala Ile Pro Leu Val Pro Leu Gly Ile Ile Phe 825 Ile Phe Leu Arg Arg Tyr Phe Leu Glu Thr Ser Arg Asp Val Lys Arg

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- Leu Glu Ser Thr Thr Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser 850 855 860
- Leu Gln Gly Leu Trp Thr Ile Arg Ala Tyr Lys Ala Glu Glu Arg Cys 865 870 875 880
- Gln Glu Leu Phe Asp Ala His Gln Asp Leu His Ser Glu Ala Trp Phe 885 890 895
- Leu Phe Leu Thr Thr Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile 900 905 910
- Cys Ala Met Phe Val Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala 915 920 925
- Lys Thr Leu Asp Ala Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu 930 935 940
- Thr Leu Met Gly Met Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val 945 950 955 960
- Glu Asn Met Met Ile Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu  $965 \hspace{1.5cm} 970 \hspace{1.5cm} 975$
- Glu Lys Glu Ala Pro Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp 980 985 990
- Pro His Glu Gly Val Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser  $995 \hspace{1.5cm} 1000 \hspace{1.5cm} 1005$
- Pro Gly Gly Pro Leu Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser 1010 1015 1020
- Gln Glu Lys Val Gly Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser 1025 1030 1035 1040
- Leu Ile Ser Ala Leu Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp \$1045\$ \$1050\$ \$1055
- Ile Asp Lys Ile Leu Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys
  1060 1065 1070
- Lys Met Ser Ile Ile Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met 1075 1080 1085
- Arg Lys Asn Leu Asp Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp 1090 1095 1100
- Asn Ala Leu Gln Glu Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro 1105 1110 1115 1120
- Gly Lys Met Asp Thr Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val1125 1130 1135
- Gly Gln Arg Gln Leu Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn  $1140 \\ 1145 \\ 1150$

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Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys
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Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr
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